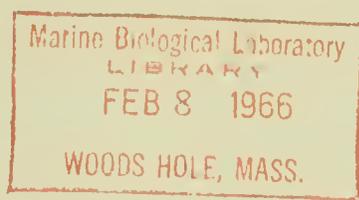


SOUTHEASTERN ALASKA STREAM CATALOG FOR REGULATORY DISTRICT No. 9

by Norman Johnston



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STREAM CATALOG OF SOUTHEASTERN ALASKA

REGULATORY DISTRICT NO. 9

Edited by

Norman Johnston

Contribution No. 195, College of Fisheries,
University of Washington

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STREAM CATALOG OF SOUTHEASTERN ALASKA
REGULATORY DISTRICT NO. 9 ^{1/}

Edited by

Norman Johnston
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A B S T R A C T

Information about part of Southeastern Alaska salmon streams is cataloged from the voluminous records of the Alaska Department of Fish and Game; the Alaska Salmon Industry; the Fisheries Research Institute of the University of Washington; the U. S. Fish and Wildlife Service, Bureau of Commercial Fisheries; and other agencies. Stream descriptions, maps, and historical records of salmon escapement data are compiled for 53 salmon streams in Southeastern Alaska Regulatory District No. 9. Each stream is located geographically by latitude and longitude and by orientation to prominent landmasses. A standard numbering system, number designations formerly in use, and common names of each stream are listed. Physical descriptions are presented for the intertidal zone and the upstream area of each stream. Available records of weather, water temperatures, and information useful to ground and aerial stream surveyors are presented in brief form. The species of salmon using the spawning grounds and estimates of the escapements each year for many years are given.

INTRODUCTION

The pink salmon of Southeastern Alaska are an important fishery resource. Millions of these fish are captured annually by the commercial fishery during their spawning migration. There are more than 1,100 known spawning streams, plus hundreds of small, individually unimportant ones, scattered along the 9,000 coastal miles of Southeastern Alaska.

^{1/}Contribution No. 195, College of Fisheries, University of Washington, Seattle, Wash. This is the fifth catalog of salmon streams of Southeastern Alaska. Previous catalogs cover areas as follows: Reg. Dist. No. 1, SSR--F 305; Reg. Dist. No. 2, SSR--F 453; Reg. Dists. Nos. 3 and 4, SSR--F 465; and Reg. Dists. Nos. 5, 6, 7, and 8, SSR--F 523.

For many years, management and research agencies of the Federal, Territorial, and State governments, Alaska salmon canners, and the Fisheries Research Institute of the University of Washington, have independently conducted stream surveys of the salmon spawning grounds. A vast amount of valuable information has been accumulated and has been, in the main, kept on file in the offices of the various organizations.

To make full use of all these scattered materials, records from the various sources have been gathered together and methods of stream surveying have been studied on a comparative basis. This information has been consolidated into a standard form which is presented here as a stream catalog.

This catalog has been compiled under a contract given to the Fisheries Research Institute by the United States Fish and Wildlife Service. The material contained herein includes 53 major and numerous minor streams of Regulatory District No. 9.

Information on each stream is presented by a stream description and, when available, a map, and escapement record. Information pertinent to the identification of each stream by name, number, and location is given, and further physical features are described where necessary for positive identification. Descriptions of each stream are given as completely as available information allows. The catalog format is so designed that future surveys by various agencies can be recorded and conducted according to a uniform style.

As a handbook of salmon streams, this catalog is expected to serve as an aid to conservation agencies as well as others who have an interest in the valuable salmon resource of Southeastern Alaska.

SOURCES OF DATA

The information compiled in this catalog is derived from a number of sources, both in and outside of the field of fishery work. A complete list of these sources is given below.

Alaska Department of Fish and Game. Valuable stream and escapement information is available in reports by research and management personnel.

Alaska Salmon Industry. Surveys (made by individual members of the industry) are among some of the earliest records available.

Fisheries Research Institute. Records are available for each year starting with 1947. Many of the Institute research projects have been concerned with precise measurements of physical factors. Data from these projects provide some of the stream descriptions and escapement estimates included in this catalog. In 1950 and 1951 the Institute assembled a stream catalog for Southeastern Alaska with all the information then available. It has served as a guide for the present catalog.

U. S. Coast and Geodetic Survey. Charts used throughout the catalog for standardization of stream location coordinates are from this source. A number of large-scale charts have provided intertidal zone information. The U. S. Coast Pilot (1952, Southeast Alaska, Dixon Entrance to Yakutat Bay, Tenth Edition, 544 p., plus charts) is the source of information on vessel approaches to stream mouths and the authority for spelling of proper names.

U. S. Fish and Wildlife Service. District catalogs of this agency are a major source of stream physical data and salmon escapement records. Escapement records from the streams where weirs were operated are actual counts. The FWS stream numbering system is the basis for the numbering system used in this catalog. Information on some of the large mainland streams with headwaters in Canada was obtained from the Canadian government by the U. S. Fish and Wildlife Service.

U. S. Federal Power Commission. The report, Water Power of Southeastern Alaska, 1947, published with the cooperation of the U. S. Forest Service, provides discharge rates and stream drainage areas, and other information about a number of important salmon streams.

U. S. Forest Service. Data on stream characteristics and salmon escapements are available on several streams in records of studies conducted by this agency's studies on the effects of logging on the physical makeup of streams.

U. S. Geological Survey. Aerial photographs from this agency are the primary source for measurements of stream distances and areas and for valley features not visible from the ground. These photographs, which are of most of the streams in Southeastern Alaska, were made by the U. S. Navy (Patrol Squadron Four) in 1948.

Local residents. Another source is the descriptive information on several major streams provided by local residents.

LIMITATIONS OF DATA

Escapement estimates obtained by visual means are often limited in accuracy because fish are not seen in turbid water, under overhanging streambanks, or in areas inaccessible to observers. Actual counts throughout the duration of the salmon run past a counting weir or tower are relatively accurate estimates of total escapement. However, it is not economically feasible to establish a weir on each stream, and escapement surveys are the only source of information for a large part of the area which must be covered. The value of the catalog as a history of the salmon escapements can be realized only if its limitations are fully known.

Escapement Estimates

Escapement estimates do not indicate the actual total escapement. At no time are all the salmon in the stream simultaneously, because the spawning run extends over a period of weeks.

Therefore, each escapement estimate is an index of the relative abundance at the time of survey.

The maximum estimate determined by survey methods at about the peak of the run is used as an estimate of the relative abundance of the total escapement. Reliable indices of relative abundance from year to year can be made only if the surveys are comparable. Evaluation of the following factors is necessary to determine the accuracy of the escapement estimates.

Observers. --The escapement records are from many different observers. Variability in estimating the number of salmon in a given area by different observers should be considered in judging the accuracy of the data. In general, variability increases with more observers.

Survey systems. --Different survey systems have been used by the various agencies. Reliability of the escapement estimates varies with the systems used.

Survey systems that use standard counting techniques over standard distances are the most reliable method now available for comparison of abundance between years, particularly when streams can be only partially covered. Standard survey distances in comparatively long streams were not widely used prior to 1949.

Survey systems requiring periodic visits to each stream during the spawning period are more reliable for estimates of peak abundance than systems requiring only one or two visits. The peak period of abundance in a salmon stream is usually relatively short, and one or two visits may miss the peak.

Type of survey. --Two basic methods for covering the streams during escapement surveys are being used.

The oldest method is the ground survey in which the observer follows the stream course on foot or in a skiff with an outboard motor. Most parts of the stream can be closely observed by this type of survey.

The newer method is aerial survey. This is a fast, economical means of covering a large number of streams in a short period of time over stream distances greater than is possible on the ground. This method requires experienced personnel familiar with ground surveys as well.

Aerial surveys are best suited for large rivers and streams where ground coverage is limited usually to the lower portion of the stream near the banks. Ground surveys are more reliable than aerial surveys on small streams that offer poor visibility from the air.

Observation conditions. --Weather is an extremely important factor in the reliability of escapement estimates. During flooding, ground surveys can be made only with great difficulty. Visibility is also greatly reduced because of turbid water. Any estimate made during years that had heavy rains of long duration during the peaks of spawning runs is not comparable with an estimate made during normal water levels.

Streams in which intertidal spawning predominates may present difficult observation conditions at high tide. Spawning salmon in the intertidal zone behave differently when the spawning areas are flooded by the high tide.

Aerial observations vary with the different types of aircraft used. Observations made from small light planes capable of following winding stream courses are more reliable than those made from larger planes which must fly at considerable height above the stream and generally at greater speeds.

Physical Observations

Observations of the characteristics of each stream by different observers have been recorded with varying degrees of accuracy. Many details of stream descriptions are dependent upon the individual observer's ability and knowledge.

Many stream dimensions are merely estimates. Instruments for measurement were usually not available to observers, and pacing and estimating were used.

Most basic stream distances have been taken from aerial photographs and are relatively accurate. However, some errors may have occurred where reference points were difficult to identify. Drainage estimates were based on compensating polar planimeter measurements of valley areas, but occasionally drainage divides were difficult to distinguish and the areas given are only approximate.

EXPLANATION OF CATALOG FORMAT

Further descriptions of the data such as estimates of timing, temperature ranges, and spawning facilities are included under these specific headings in the explanation of the catalog format that follows:

Stream Designations

Stream name. --This appears in the center of the first line of the heading. Recorded names or common local names are used when available. Otherwise unnamed streams of importance are given descriptive names corresponding to location or other distinguishing features. Some streams have identical names; they are retained without change because of

local usage. Many minor streams have no names; hence they are identified only by number.

Stream number. --This number appears on the right side of the first line of the heading. The letter preceding the number designates the administrative district in Southeastern Alaska; e. g., "E" for Eastern. Continuity of stream numbers along a shoreline is followed where practical. Due to the numerous islands, breaks in the sequence have been necessary. A catalog number combining numbers and letters designates a minor stream, either adjacent to or between major streams numbered in sequence. For example, stream number 28A is a minor stream adjacent to major stream number 28.

ADF Statistical number. --A space for the new ADF Statistical number is provided for use when the new numbers are assigned.

Latitude and longitude. --This appears on the second line, left side, of the heading. Location of streams is given by the use of "N" for north latitude, and "W" for west longitude, stated in degrees (°), and minutes and tenths of minutes ('). Location of the high tide point on the stream is given for positive identification.

Geographic location. --This appears on the third line of the heading. Each stream location is described by the administrative district, major channel, bay or inlet, arm or cove, and location within the smallest division given by direction (from true north) and distance (nautical miles).

Major species. --Included are those species of salmon which furnish the bulk of spawning in the stream. Where more than one dominates, both (or more) are included.

Other species. --This indicates other known species of salmon and trout using the stream.

Escapement timing. --The timing is based on systematic stream survey records, which include a number of years of surveys with visits before, near, and after the peaks of abundance. Extensive stream temperature studies were conducted in conjunction with most of these surveys. The earliest runs of salmon occur along the colder mainland streams. The latest runs are in the outer channel and coastal areas where stream levels depend on rainfall. An intermediate timing of the runs occurs in the region lying between the mainland and outer coastal areas. Three major time divisions indicate the peak period that the major species are found in the stream. "Early" designates peaks before August 15; "middle," peaks between August 15 and September 15; "late," peaks after September 15. The range of time in which the major species are found in the streams is given by months.

Spawning facilities. --This includes a general classification rating of poor, fair, good, excellent. The rating is based on estimates by various individuals.

Stream temperatures. --In this classification the following general ranges are used for each stream. Each range is for the 3-month period (July, August, and September) when most salmon spawning migrations occur:

Cold-range, averaging less than 50° F., usually an early-run stream.

Normal-range, averaging between 50° and 55° F., usually a middle-run stream.

Warm-range, averaging over 55° F., usually a late-run stream.

These ranges generally correspond to the geographic location of the stream and time of the runs. Where only limited temperature information is available for a stream, the range has been estimated from its location and timing of run. Cold-range streams are usually found along the mainland or on the larger islands in the northern part of Southeastern Alaska. Warm-range streams are usually found along the outer channels and coastal areas, which are dependent upon precipitation as the primary source of supply. The normal-range streams appear to fall geographically between and may combine characteristics of both cold- and warm-range streams. Timing of the salmon run, especially pink salmon, also follows the geographic distribution outlined above. Recording thermograph data, available from a number of streams with known escapement timing, have been used as a basis for comparison.

Valley description. --Glacial, stream-cut, describe valley origin with a general description of the outstanding features such as length, width, timber, slopes, directions. They have been obtained from aerial photographs and by direct observations.

Drainage area. --This has been either estimated in square miles or computed with a polar planimeter from aerial photographs. Estimates of the drainage area of large systems have been taken from the small-scale, key, composite photographs and are less reliable. Data from Water Power of Southeastern Alaska 1947 are included when available. Descriptions are given of supply sources, drainage topography, and characteristics governing water quality and temperature ranges during spawning from the editor's interpretation of aerial photos and local knowledge.

Stream mouth identification. --This is a description of some general features visible at the stream mouth.

Anchorage. --Descriptions are given of temporary anchorages that stream survey vessels have used for short stops. Overnight and storm anchorages are given in the U. S. Coast Pilot.

Trails and survey routes. --These include descriptions of trails that have been used by ground parties on stream surveys. Where other than the streambed was used, a description of routes is given, including difficult points, identification, outstanding features, and presence of brown bears. Reference to right or left bank is made while facing in the direction of the current.

Aerial survey notes. --The notes include remarks from various individual observations on the visibility in each stream and the conditions considered necessary for adequate observations. Approaches to valley, starting points, and any known hazards are described from aerial surveyor's notes and the editor's knowledge of the area.

Intertidal Zone

Length. --The mileage is calculated from mean high to mean low tide and obtained from aerial photographs measured to the nearest tenth of a mile. Where low-tide locations were not known, the measurement was made from the edge of tidal flats visible in the photographs.

Average width. --These are estimates in feet, based on observations by various individuals.

Average depth. --These are estimates in inches, or in feet in larger systems, based on observations by various individuals.

Gradient. --Estimates are in degrees from horizontal, based on observations by various individuals.

Velocity. --Estimates are in feet per second during normal water levels, based on observations by various individuals.

Bottom. --A description is given of the composition such as gravel (range from 1/4 inch to over 5 inches in diameter, arbitrary division point), mud, silt, organic materials, broken and water-washed rock, boulders, large rocks, bedrock, according to observations by various individuals.

Low-tide location. --The mean low-tide point is an approximation and is given only where

it falls near good identification points, usually found in restricted stream outlets.

High-tide locations. -- Mean high tide generally has been found to correspond to the tree line. Other methods of locating the high tides, such as markers, are described when present.

Salmon schooling areas. --The areas are usually found near high tide where pools often occur. The areas are described with reference to the mean high tidemark. Annual variations in streambeds may alter locations of schooling areas.

Spawning areas. --Major areas are described with reference to the high tidemark. Its location may change with stream conditions.

General notes. --This includes notes pertinent to the intertidal stream that are of interest and importance in the description of runs.

Upstream

Length accessible. --The length in miles was measured from aerial photographs along the course of the stream to the known upper limits of salmon migration. Where barriers restrict major species but allow more vigorous species to pass, secondary species limits are given under "Barriers."

Gradient. --Slope was estimated in degrees from horizontal, based on observation by various individuals.

Velocity. --Estimate in feet per second during normal water levels and from observations by various individuals.

Bottom. --A description is given whether gravel (range from 1/4 inch to over 5 inches in diameter, arbitrary division point), mud, silt, organic materials, broken and water-washed rock, boulders, and bedrock are present, from observations by various individuals.

Marker distance. --Distance is given in miles along stream course to standard termination point for salmon counting.

Marker identification. --Descriptions of an artificial marker or of identification feature marking termination point for salmon spawning surveys is given.

Barriers. --Distance and location above high-tide point to known barriers, both passable and impassable, are listed. Descriptions are also given when available.

Tributaries. --Tributaries used by spawning salmon are listed by distance from the mouth of the main stream, by direction, and by importance. Tributaries not used by salmon, but numerous, are mentioned under "Drainage."

Salmon schooling areas. --Based on survey records, major salmon schooling areas are listed where specific locations have been observed for an individual stream.

Spawning areas. --Major areas are described by distance above high tide or from a reference point in the stream.

General notes. --The notes include data pertinent to the upstream areas that are of interest and importance in the description of salmon escapements.

Escapement Record

Stream name. --This appears in the center of the first line of the heading.

Stream number. --The new and old numbers appear on the right side of the first line of the heading on the first page of the escapement record.

Date surveyed. --Surveys are listed chronologically.

Miles surveyed. --Distances are given as measured along stream courses to the termination point of the regular survey. Ground surveys are designated by "G" and aerial surveys by "A." These symbols precede miles surveyed.

Surveyed by. --Initials of surveying organizations are listed as follows: Alaska Department of Fish and Game, ADF; Alaska Salmon Industry, ASI; Fisheries Research Institute, FRI; U. S. Fish and Wildlife Service, Bureau of Commercial Fisheries, FWS; and U. S. Forest Service, USFS.

Pinks, chums, other species. --Abundance of salmon observed during surveys is given as a numerical estimate. Estimates of secondary species are usually less reliable than those for the primary species. Estimates of dead salmon of all species usually are very general, having been based on the percentage of the count.

Remarks. --Adjective ratings are given first when available. The ratings range from poor to excellent and describe the abundance of salmon for the surveyed date only. They do not indicate seasonal escapement abundance. Other notes

entered in this column include survey conditions, behavior and distribution of salmon, and salmon observations beyond stated survey distances.

Weir Record

Salmon escapement counts made by weirs operated by the U. S. Fish and Wildlife Service and the Alaska Department of Fish and Game follow Escapement Record when available.

MAPPING SYMBOLS



North

LANDFORMS



Bank



Bedrock



Boulders



Canyon



Dry Channel



Glacier



Gorge



Gravel



Hill

Low or Rolling Grade



Steep Grade



Ridge



Sand (bar)

MARKERS



Fish and Wildlife
Limit Marker



Forest Service
Trail Marker

HT

High Tide Marker



Marker



Section Marker



Stream Gage

ROUTES



Railroad

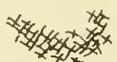


Road



Trail (type designated)

STRUCTURES



Beaver Dam



Bridge



Cabin
Instrument Shelter



Cable Crossing



Dam



Pier



Piling



Weir



Windfall

VEGETATION



Brush



Grass



Muskeg



Stump



Trees
Conifers



Deciduous

WATER FORMS



Anchorage



Channel (in sand
and gravel)



Falls



Fathom



Float



Pool



Rapids



Riffle



Stream Entrance



Tidal Area (sand and
gray value)



Water (gray value)

ALPHABETICAL INDEX OF SALMON STREAMS

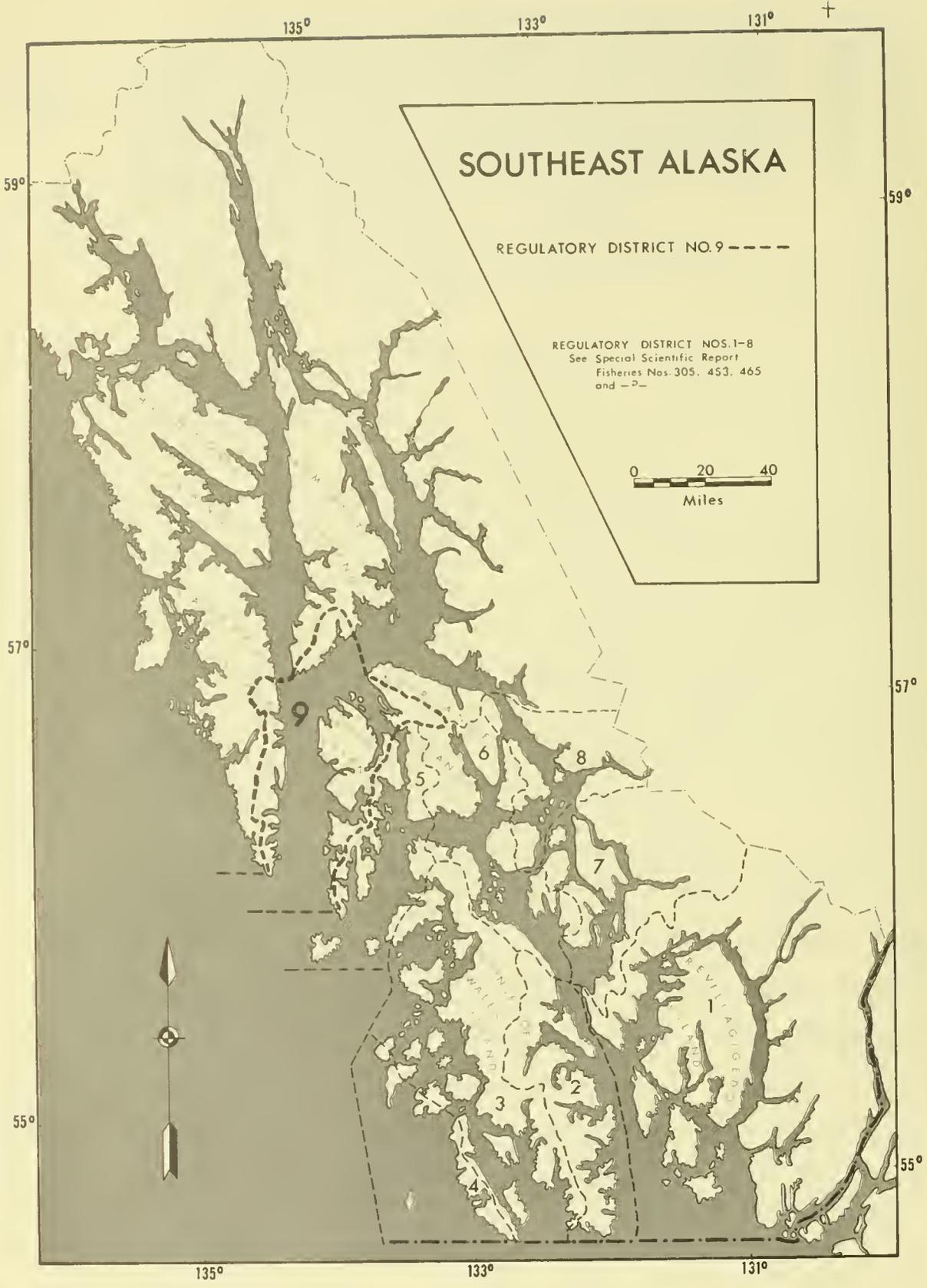
ALECKS CREEK, Chatham Strait, Tebenkof Bay, 1.5 miles E. of entrance to Elena Bay	E	44C
Chatham Strait, Bay of Pillars, 0.5 mile from head, S. arm on E. side	E	43
Chatham Strait, Bay of Pillars, W. head of S. arm	E	43E
Chatham Strait, Big Port Walter, Lover's Cove, Head	E	49A
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NUMERICAL INDEX OF SALMON STREAMS

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E	44D	Chatham Strait, Tebenkof Bay, Elena Bay, E. head of S. arm
E	45	Chatham Strait, Tebenkof Bay, Petrof Bay, E. central shore
E	45A	Chatham Strait, Tebenkof Bay, Petrof Bay, W. central shore
E	45B	Chatham Strait, Tebenkof Bay, Petrof Bay, head of large bight on SE. corner
E	45C	Chatham Strait, Tebenkof Bay, Head, W. arm

E 46 Chatham Strait, Tebenkof Bay, Thetis Bay, central E. shore
E 46A Chatham Strait, Tebenkof Bay, Thetis Bay, Head
E 46B Chatham Strait, Tebenkof Bay, Thetis Bay, W. shore
E 47 DEEP CREEK, Chatham Strait, Red Bluff Bay, SW. head of bay
E 47A Chatham Strait, Red Bluff Bay, outside of bay, S.
E 48 Chatham Strait, Gut Bay, SW. end
E 49 SASHIN CREEK, Chatham Strait, Little Port Walter, Head
E 49A Chatham Strait, Big Port Walter, Lover's Cove, Head

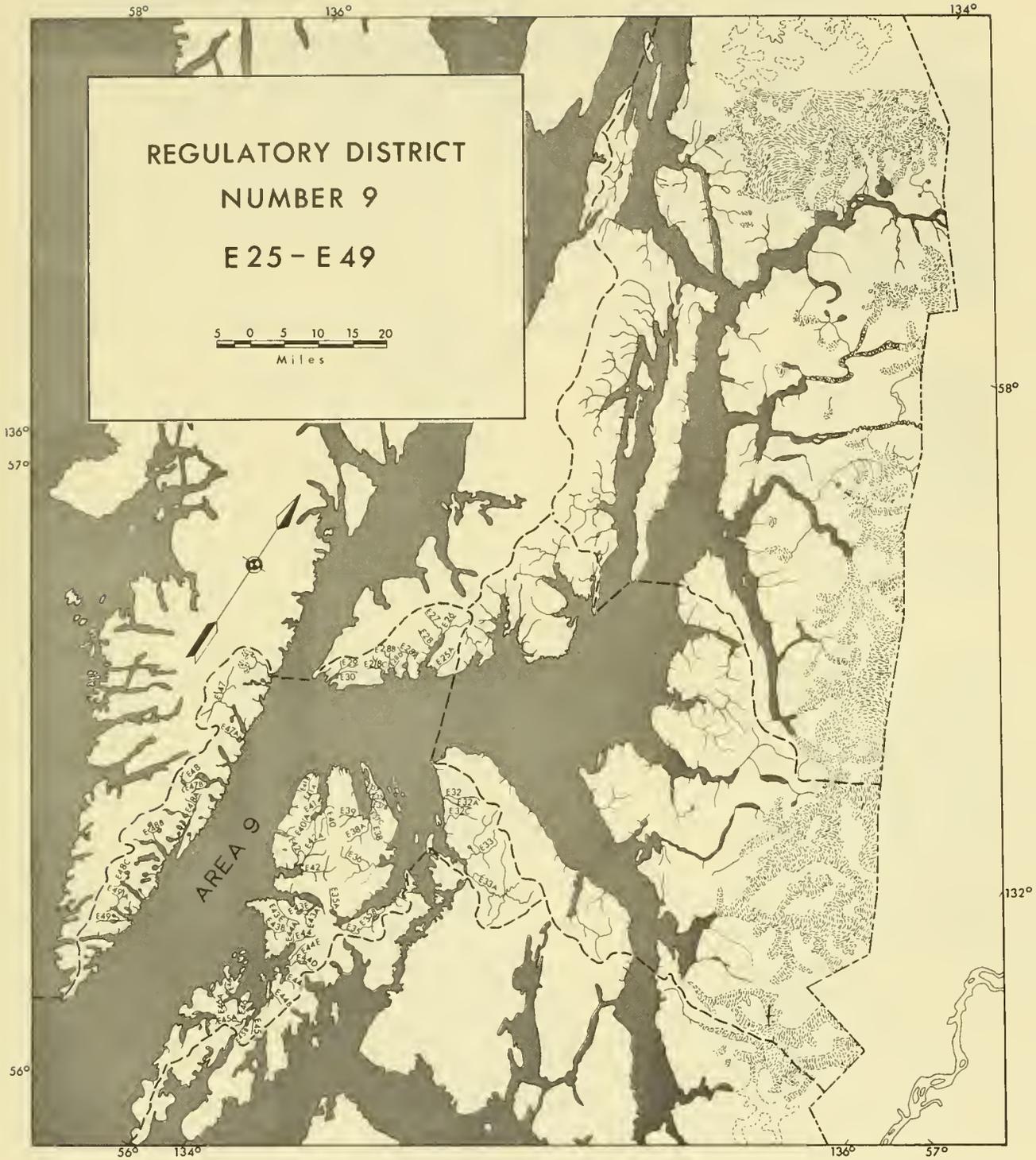


SOUTHEAST ALASKA

REGULATORY DISTRICT NO. 9 - - - -

REGULATORY DISTRICT NOS. 1-8
 See Special Scientific Report
 Fisheries Nos. 305, 453, 465
 and --





57° 10.9' N. 134° 14.0' W.

ADF STAT. No.

E 2SA

EASTERN, FREDERICK SOUND, WOEWODSKI HARBOR, 1 mile inside entrance, E. shore.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho.
ESCAPEMENT TIMING Middle.
SPAWNING FACILITIES Limited.
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 5.3 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE Near stream mouth just off flats.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Too brushy for survey.

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

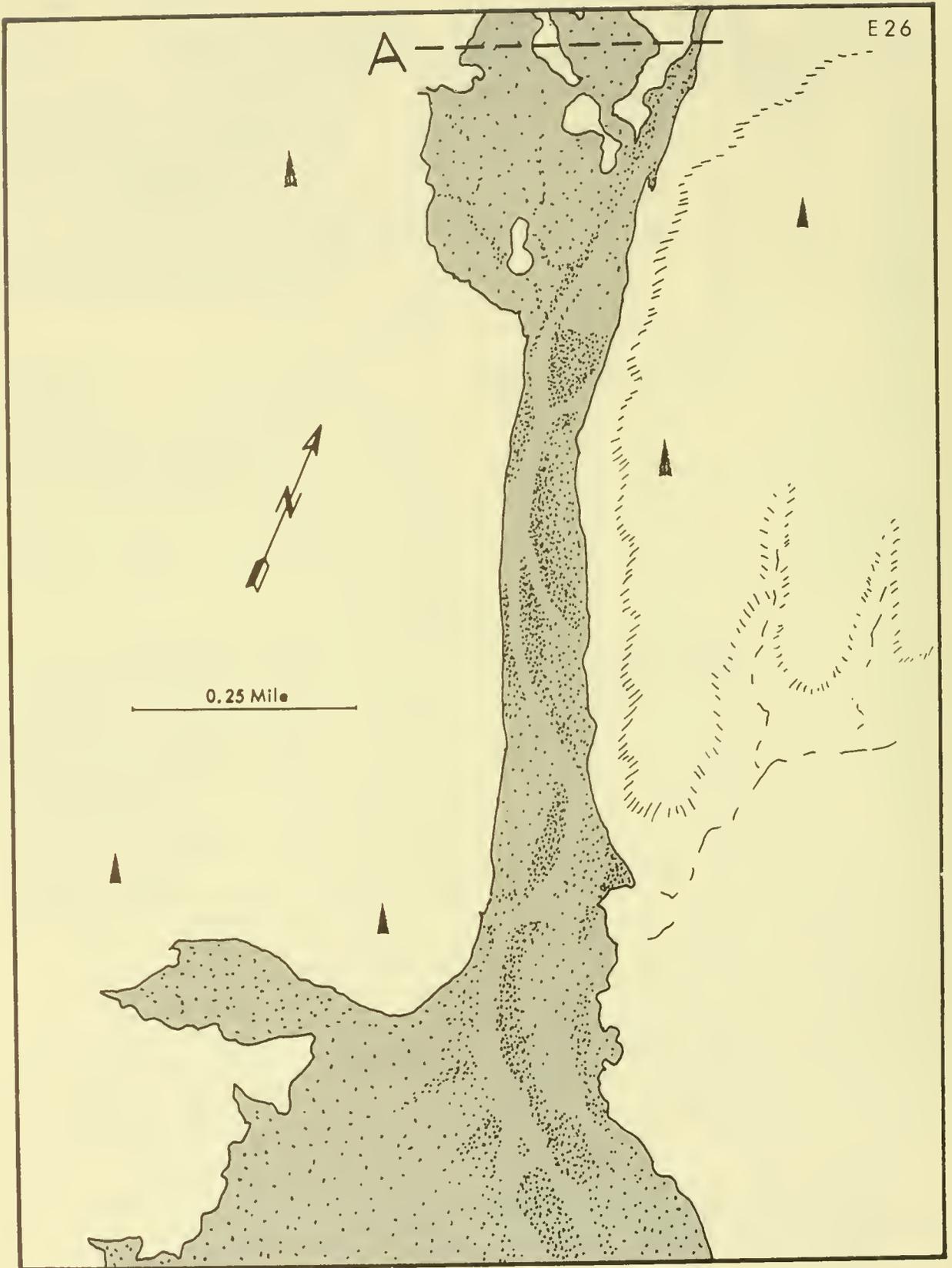
LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

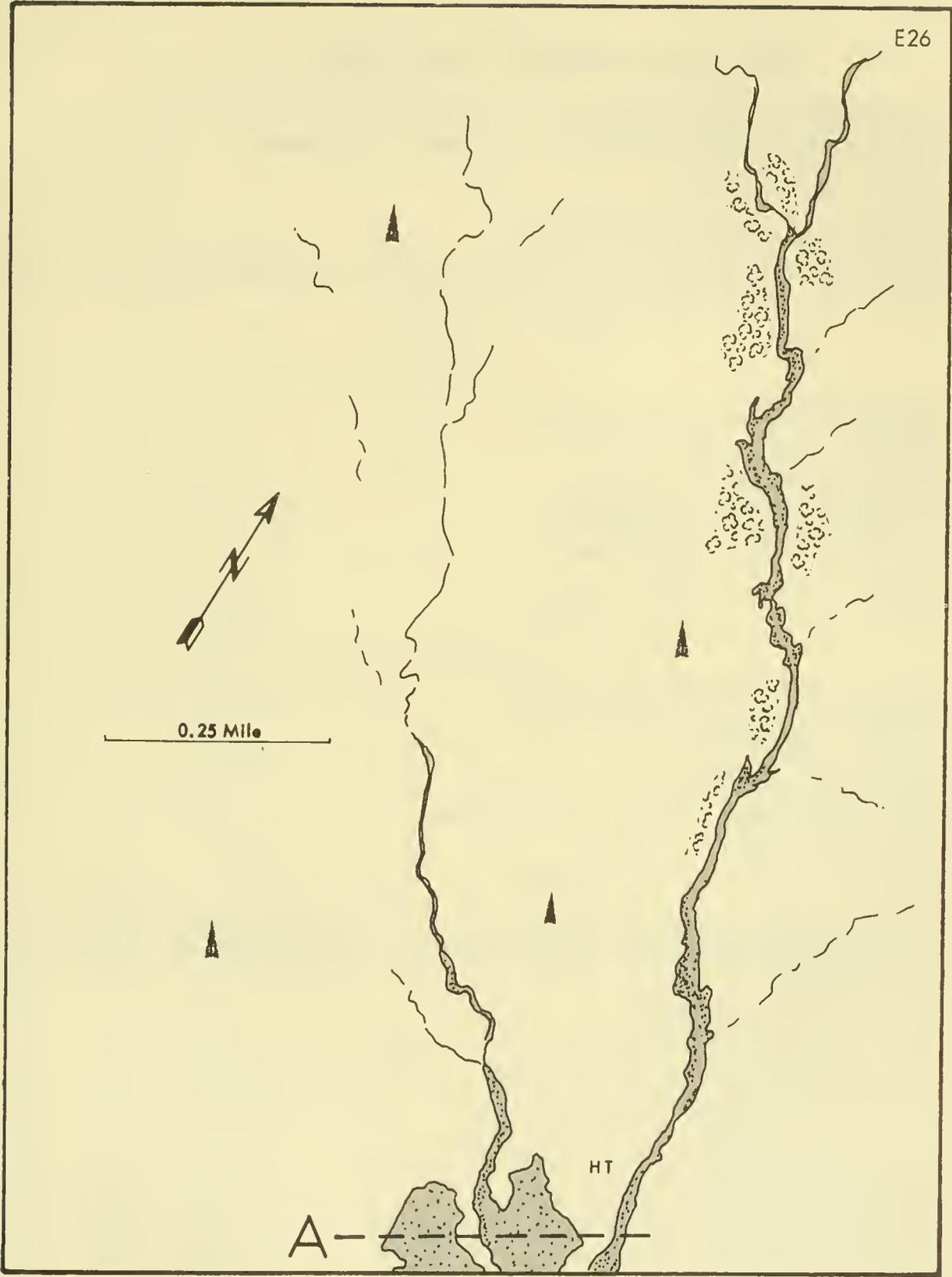
ESCAPEMENT RECORD

ADF STAT. No.
E 25A

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1952								
Aug 25	A 1.5	FWS			4			Poor seeding
1954								
Sept 13	G 0.5	FWS	2,000		500			
1955								
July 23	A 2.0	FWS						No salmon observed
1956								
Sept 15	0.2	FWS	1,000					





57° 15.4' N. 134° 17.5' W.

EASTERN, FREDERICK SOUND, SOUTH PASSAGE, ELIZA HARBOR, Head

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho.
 ESCAPEMENT TIMING Middle-late.
 SPAWNING FACILITIES Very good gravel in intertidal zone and in stream.
 STREAM TEMPERATURES
 VALLEY DESCRIPTION
 DRAINAGE 9.7 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE Good anchorage off flats or in bight at entrance to Eliza Harbor behind Liesnoi I.
 TRAILS AND SURVEY ROUTES Stream very open and easy to walk and wade; logging road for length.
 AERIAL SURVEY NOTES Easy to survey. Water clear.

INTERTIDAL ZONE

LENGTH 0.5 mile. AVERAGE WIDTH/DEPTH
 GRADIENT AND VELOCITIES Moderate.
 BOTTOM Gravel.
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS Several good pools.
 SPAWNING AREAS Throughout zone.
 GENERAL NOTES Very good spawning areas.

UPSTREAM

LENGTH ACCESSIBLE Approximately 2 miles. AVERAGE WIDTH/DEPTH 50'/7".
 GRADIENT AND VELOCITIES Moderate.
 BOTTOM Good gravel.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS
 TRIBUTARIES Right tributary dry on low water years.
 SCHOOLING AREAS Ample.
 SPAWNING AREAS Very good to above forks.
 GENERAL NOTES Logging road being constructed up W. side of stream in 1963. It appears that this stream has a middle-run in late August, but receives its heaviest seeding in mid-September in some years.

ESCAPEMENT RECORD

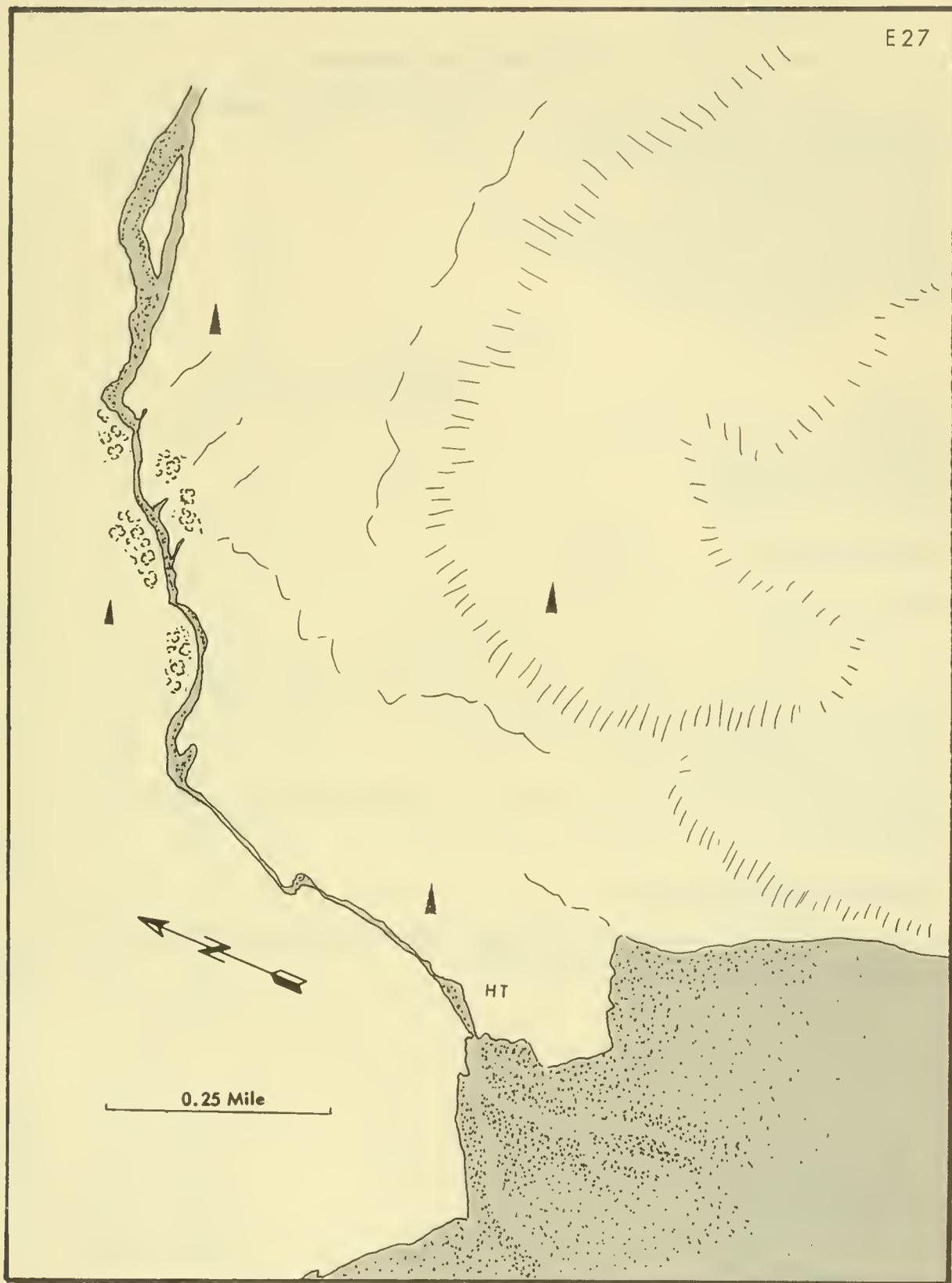
[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 13			54,000					
1945								
Sept 23	1.0		80,000		500			
1947								
Oct. 4	1.0		4,000		200		50 cohos	
1950								
Aug 31	A							
Sept 14	0.6		204		125			
Nov 7	0.2							No fish observed
1953								
Sept 12	A 1.0	FWS	450		1,500		50 cohos	
1955								
July 21	G 0.2	ADF	100				100 cohos	500 pinks at mouth
July 26	G 0.2	ADF	100				100 cohos	500 pinks at mouth
Sept 10		ADF	8,600		400			5,000 pinks at mouth
1956								
Sept 1	0.7	FWS	25,000					
Sept 2	1.0	FWS	25,000					
Sept 14	1.0	FWS	17,000					
1957								
Aug 3	G 0.2	FWS	>1,300					
Aug 13	G 0.2	FWS	2,000					
Aug 17	G	FWS	650					
Aug 29	G	FWS	800		11			
Aug 30	G	FWS	2,850		150			
Sept 6	G 1.0	FWS	4,018		370			392 dead fish
Sept 13	A	FWS						Jumpers in bay
1958								
Aug 11	G 1.5	FWS	1,000		200			
Sept 1	G 0.5	FWS	3,900		100			
Sept 11	G 1.0	FWS	3,850		950			
1959								
July 21	A 0.7	FWS	500		50			800 pinks at mouth
Aug 11	A 1.0	FWS	10,000					
1960								
July 21	A	ADF						No fish observed
July 29	A	ADF						No fish observed
Sept 6	A length	ADF	1,000		1,500			
1961								
July 23	A 2.0	ADF	2,000					1,500 in intertidal
Sept 8	A 2.0	ADF	23,000					Mixed
1962								
July 16	A 0.2	ADF						No fish observed
July 24	G 0.5	ADF	350					4,000 mixed at mouth
July 28	A mouth	ADF						No fish observed
Aug 1	G 1.0	ADF	800		50			600 in intertidal zone
Aug 13	G 0.7	ADF	1,000					6,000 in intertidal zone
Aug 20	G 0.2	ADF	300					Very few chums
Aug 29	A	ADF						1,100 mixed; 3,000 in intertidal zone

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1963								
July 24	G 0.5	ADF	350		0			3,000-5,000 mixed at mouth
Aug 1	G 1.0	ADF	800		50			600 in intertidal zone
Aug 13	G 0.7	ADF	1,000					5,000-7,000 in intertidal
Aug 29	A	ADF						1,100 mixed in stream; 3,000 in intertidal zone



57° 13. 2' N. 134° 18. 0' W.

EASTERN, FREDERICK SOUND, SOUTH PASSAGE, ELIZA HARBOR, W. head.

MAJOR SPECIES Pink. OTHER SPECIES Chum.
 ESCAPEMENT TIMING Pink late.
 SPAWNING FACILITIES
 STREAM TEMPERATURES
 VALLEY DESCRIPTION
 DRAINAGE 6.9 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE E. of Liesmoi I.
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
 GRADIENT AND VELOCITIES
 BOTTOM
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1 mile. AVERAGE WIDTH/DEPTH 30'6".
 GRADIENT AND VELOCITIES Moderate current.
 BOTTOM Good gravel.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS About 1.25 miles from the mouth there is a waterfall that salmon cannot ascend.
 TRIBUTARIES
 SCHOOLING AREAS
 SPAWNING AREAS Excellent.
 GENERAL NOTES Drainage area has been logged. Fringe of trees has been left along part of the stream. Log jam reported 200 yards below falls.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Miles	
1940								
Sept 14			26,700					
1943								
Oct 14	0.2		2,900		100			
1945								
Sept 23	0.7		50,000					A few chums
1947								
Oct 4	1.2		6,000		600			
1953								
Sept 12	G 1.0	FWS	450		1,500		50 cohos	
Nov 14	G 0.2	FWS						No live fish. Few dead
1954								
Sept 3	G 1.5		16,500		3,500			500 pinks at mouth
1955								
July 21	G 0.2	FWS	100				100 cohos	
July 23	A 2.0	FWS						No salmon observed
July 26	G 0.2	FWS	100				100 cohos	
1956								
Sept 14	1.0	FWS	2,000					4,000 pinks at mouth
1957								
Aug 4	G	FWS	37					
Aug 9	G	FWS	150					
Aug 11	A length	FWS	1,000					
Aug 13	G 0.5	FWS	44					
Aug 14	G 0.5	FWS	44					
Aug 17	G 0.2	FWS	92					
Aug 21	G 0.5	FWS	80					
Aug 27	G	FWS	350					
Sept 5	G 0.5	FWS	155		20			
1958								
Aug 12	G 1.0	FWS	3					450 pinks, 8 chums in high tide zone
Sept 1	G 0.2	FWS	130		10			
1959								
July 21	A falls	FWS						No fish observed
Oct 4	G	FWS	25		5			75 chums at mouth
1960								
								No record
1961								
								No record
1962								
July 28	A mouth	ADF						No salmon observed
1963								
July 16	A mouth	ADF						No salmon observed
July 24	G 0.2	ADF						No salmon observed; 4,000 mixed at mouth
Aug 1	G 0.5	ADF			4			
Aug 13	G 0.7	ADF	1,100					Fish spawning

57° 11.8' N. 134° 18.2' W.

EASTERN, FREDERICK SOUND, SOUTH PASSAGE, ELIZA HARBOR, 4 miles S. of head, W. shore.

MAJOR SPECIES	Pink.	OTHER SPECIES
ESCAPEMENT TIMING		
SPAWNING FACILITIES	Fair.	
STREAM TEMPERATURES		
VALLEY DESCRIPTION		
DRAINAGE	7.8 square miles (polar planimeter).	
STREAM MOUTH IDENTIFICATION		
ANCHORAGE	E. of Liesnoi I.	
TRAILS AND SURVEY ROUTES		
AERIAL SURVEY NOTES		

INTERTIDAL ZONE

LENGTH	AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES	
BOTTOM	
LOW TIDE LOCATION	
HIGH TIDE LOCATION	
SCHOOLING AREAS	
SPAWNING AREAS	
GENERAL NOTES	

UPSTREAM

LENGTH ACCESSIBLE	AVERAGE WIDTH/DEPTH	28'18".
GRADIENT AND VELOCITIES	Turbulent current.	
BOTTOM	Rock with mixture of gravel.	
MARKER DISTANCE		
MARKER IDENTIFICATION		
BARRIERS		
TRIBUTARIES		
SCHOOLING AREAS		
SPAWNING AREAS		
GENERAL NOTES		

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 22		FWS	400					
1947								
Oct 4		FWS	500		40		20 cohos	
1950								
Aug 31	0.2	FWS						Few at mouth
Sept 14	0.5	FWS	10		34			
Nov 7	0.5	FWS						No fish observed
1953								
Sept 12	G 0.2	FWS			1			
1954								
Sept 13	G 0.5	FWS	700		600			
1955								
July 21	0.2	FWS	100					
July 23	A 2.0	FWS						No salmon observed
July 26	0.2	FWS	100					
Sept 11	0.2	FWS	40					
1956								
July 24	0.7	FWS						No salmon observed
Aug 4	0.2	FWS						No salmon observed
Aug 12	A	FWS						No salmon observed
Aug 31	0.2	FWS	700		2			
Sept 1		FWS	700		2			
Sept 13		FWS	2,000					
1957								
Aug 11	A length	FWS	100					
Aug 11	G 0.3	FWS	60					
Sept 7	G 0.2	FWS	2		49			
1958								
July 23	G 1.0	FWS						No salmon observed
Sept 1	G 0.3	FWS	110					50 pinks in tidal zone
1959								
July 21	A 0.5	FWS	150					
1960								
Sept 6	A 1.0	ADF						No salmon observed
1961								
July 23	A mouth	ADF						No salmon observed
1962								
July 28	A mouth	ADF						No salmon observed
1963								
July 16	A IT	ADF						No salmon observed
July 24	G 0.5	ADF						No salmon observed
Aug 1	G 0.5	ADF	1					No salmon at mouth or in intertidal zone
Aug 13	G 0.5	ADF						No salmon observed
Aug 29	A IT	ADF						No fish- stream dry

EASTERN, FREDERICK SOUND, CHAPIN BAY, Head.

MAJOR SPECIES	Pink.	OTHER SPECIES	Chum.
ESCAPEMENT TIMING	Middle - August.		
SPAWNING FACILITIES			
STREAM TEMPERATURES			
VALLEY DESCRIPTION			
DRAINAGE	1.9 square miles (polar planimeter).		
STREAM MOUTH IDENTIFICATION			
ANCHORAGE			
TRAILS AND SURVEY ROUTES			
AERIAL SURVEY NOTES			

INTERTIDAL ZONE

LENGTH	AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES	
BOTTOM	
LOW TIDE LOCATION	
HIGH TIDE LOCATION	
SCHOOLING AREAS	
SPAWNING AREAS	
GENERAL NOTES	

UPSTREAM

LENGTH ACCESSIBLE	AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES	
BOTTOM	
MARKER DISTANCE	
MARKER IDENTIFICATION	
BARRIERS	
TRIBUTARIES	
SCHOOLING AREAS	
SPAWNING AREAS	
GENERAL NOTES	

ESCAPEMENT RECORD

ADF STAT. No.

E 28A

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1948								
-								No fish observed
1956								
Sept 13	0.1	FRI	200					1,000 at mouth
1957								
July 28	G mouth	FWS						No fish observed
Aug 28	G mouth	FWS						No fish observed
Sept 7	G 0.1	FWS						No fish observed
1958								
July 21	A	FWS						No fish observed
Sept 1	mouth	FWS						No fish observed
1963								
July 24	G	ADF						No fish observed; rapids about 400 yards from mouth; stream goes under- ground at intertidal zone
	350 yds							

EASTERN, FREDERICK SOUND, HERRING BAY, N. head of bay.

MAJOR SPECIES Pink. OTHER SPECIES
 ESCAPEMENT TIMING Middle - late.
 SPAWNING FACILITIES
 STREAM TEMPERATURES
 VALLEY DESCRIPTION
 DRAINAGE 3 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
 GRADIENT AND VELOCITIES
 BOTTOM
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH
 GRADIENT AND VELOCITIES
 BOTTOM
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS
 TRIBUTARIES
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Sept 16	0.2	FWS	500					
1957								
Sept 7	G 0.5	FWS	2		118			
1963								
July 24	G 0.2	ADF						No fish observed; 2 schools at mouth
July 29	A mouth	ADF						11,000 salmon at mouth

EASTERN, FREDERICK SOUND, HERRING BAY, S. arm, Head.

MAJOR SPECIES
 ESCAPEMENT TIMING
 SPAWNING FACILITIES
 STREAM TEMPERATURES
 VALLEY DESCRIPTION
 DRAINAGE 9.4 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
 GRADIENT AND VELOCITIES
 BOTTOM
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
 GRADIENT AND VELOCITIES
 BOTTOM
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS
 TRIBUTARIES
 SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Sept 16	G 0.2	FWS						5,000 pinks at mouth; good seeding
1963								
July 24	G 0.2	ADF	350					Few jumps at mouth
July 29	A mouth	ADF	11,000					

EASTERN, FREDERICK SOUND, HERRING BAY, immediately E. of 28B.

MAJOR SPECIES Pink. OTHER SPECIES
 ESCAPEMENT TIMING
 SPAWNING FACILITIES
 STREAM TEMPERATURES
 VALLEY DESCRIPTION
 DRAINAGE 3 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
 GRADIENT AND VELOCITIES
 BOTTOM
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES

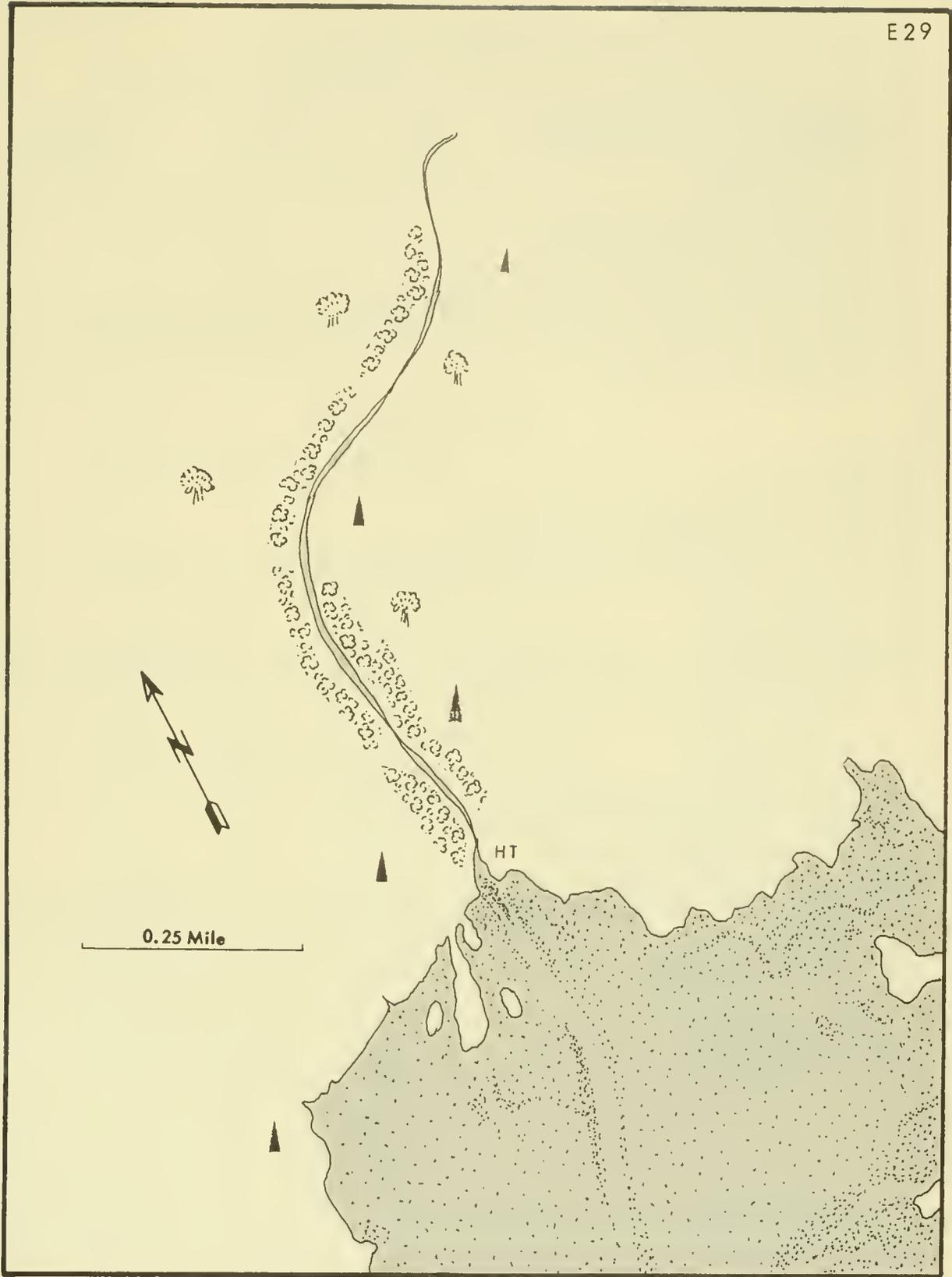
UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH
 GRADIENT AND VELOCITIES
 BOTTOM
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS
 TRIBUTARIES
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Sept 16	0.2	FWS	100					5,000 pinks at mouth
1957								
July 24	G 0.2	ADF						No fish observed
July 29	A mouth	ADF	11,000					
Aug 11	A length	FWS						No fish observed
Sept 7	G 0.3	FWS						No fish observed



57° 03.4' N. 134° 32.6' W.

EASTERN, FREDERICK SOUND, MURDER COVE, W. stream at head.

MAJOR SPECIES Pink, chum.

OTHER SPECIES Coho.

ESCAPEMENT TIMING Middle, Aug.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Cold-middle range Observed temperatures: 53.5° F., 8/20/48;
44° F., 9/10/48.VALLEY DESCRIPTION Wide, flat valley, heavily timbered with a few muskegs scattered throughout.
Stream rises toward the north sharply.

DRAINAGE 8.1 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters through a long tideflat area at extreme head of bay.
This stream and E 30 have the same intertidal area.

ANCHORAGE Vessels can lay at old cannery site located on E. shore at head of bay.

TRAILS AND SURVEY ROUTES Stream has a slippery bottom in spots but is otherwise easily hiked.

AERIAL SURVEY NOTES Very difficult to survey from air above the intertidal area due to brush
overstory and muskeg water.

INTERTIDAL ZONE

LENGTH 0.5 mile.

AVERAGE WIDTH/DEPTH 16'/7".

GRADIENT AND VELOCITIES Slight.

BOTTOM Small gravel, some clay, and bedrock.

LOW TIDE LOCATION

HIGH TIDE LOCATION End of grass flats at beginning of timber.

SCHOOLING AREAS Schooling is done primarily off the stream mouth as the intertidal area is fairly
shallow.

SPAWNING AREAS

GENERAL NOTES A long, flat, intertidal zone. Stream joins another small stream which flows from
the right side of the head of the cove about three-quarters of the way up the intertidal zone.

UPSTREAM

LENGTH ACCESSIBLE 0.5 surveyed.

AVERAGE WIDTH/DEPTH 16'/7".

GRADIENT AND VELOCITIES Slow to moderate.

BOTTOM Medium-sized gravel, some bedrock, and clay.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None reported.

TRIBUTARIES Two small streams enter this stream from a hill on the left going up, both impassable
to fish.

SCHOOLING AREAS

SPAWNING AREAS Good.

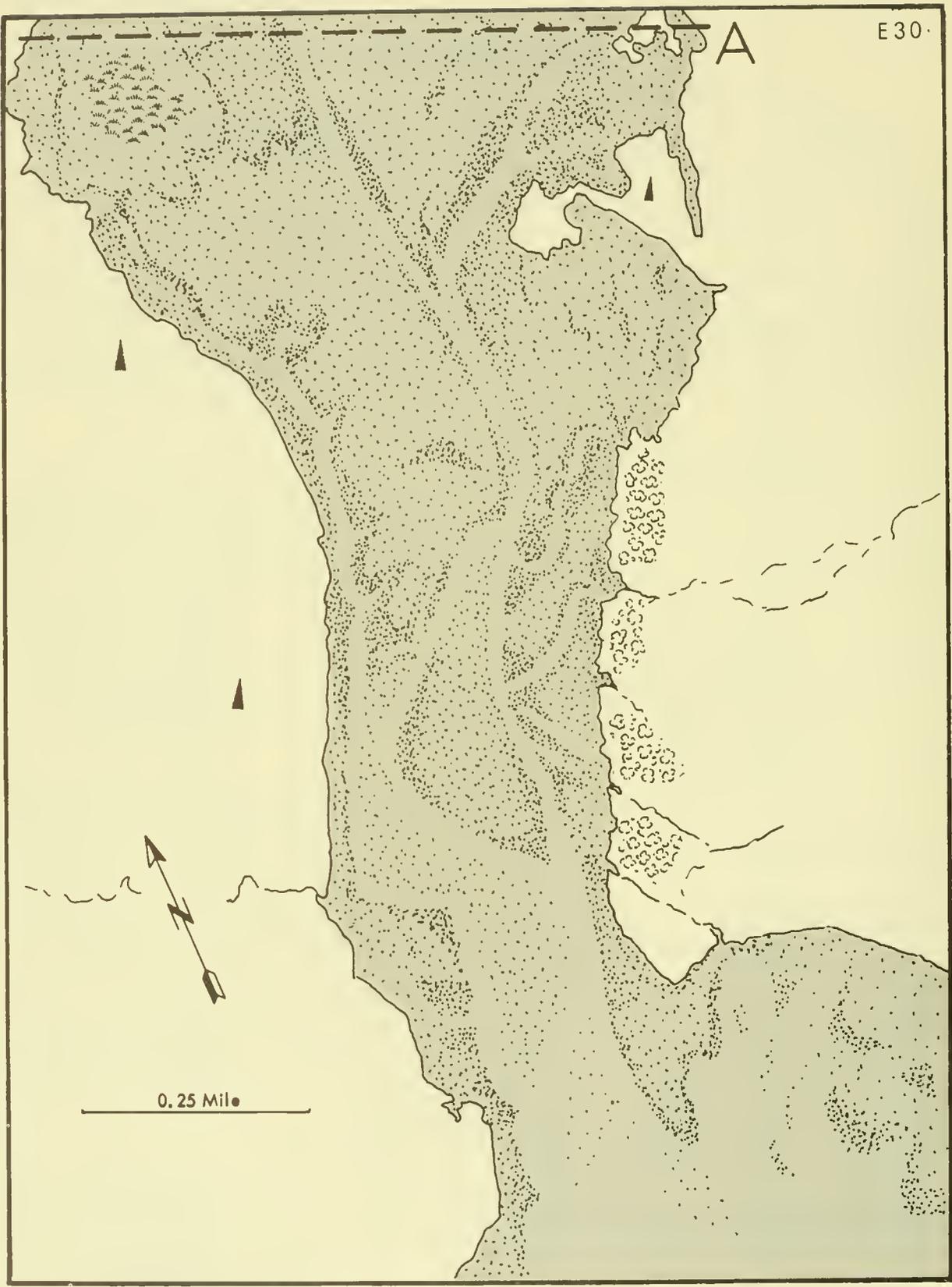
GENERAL NOTES

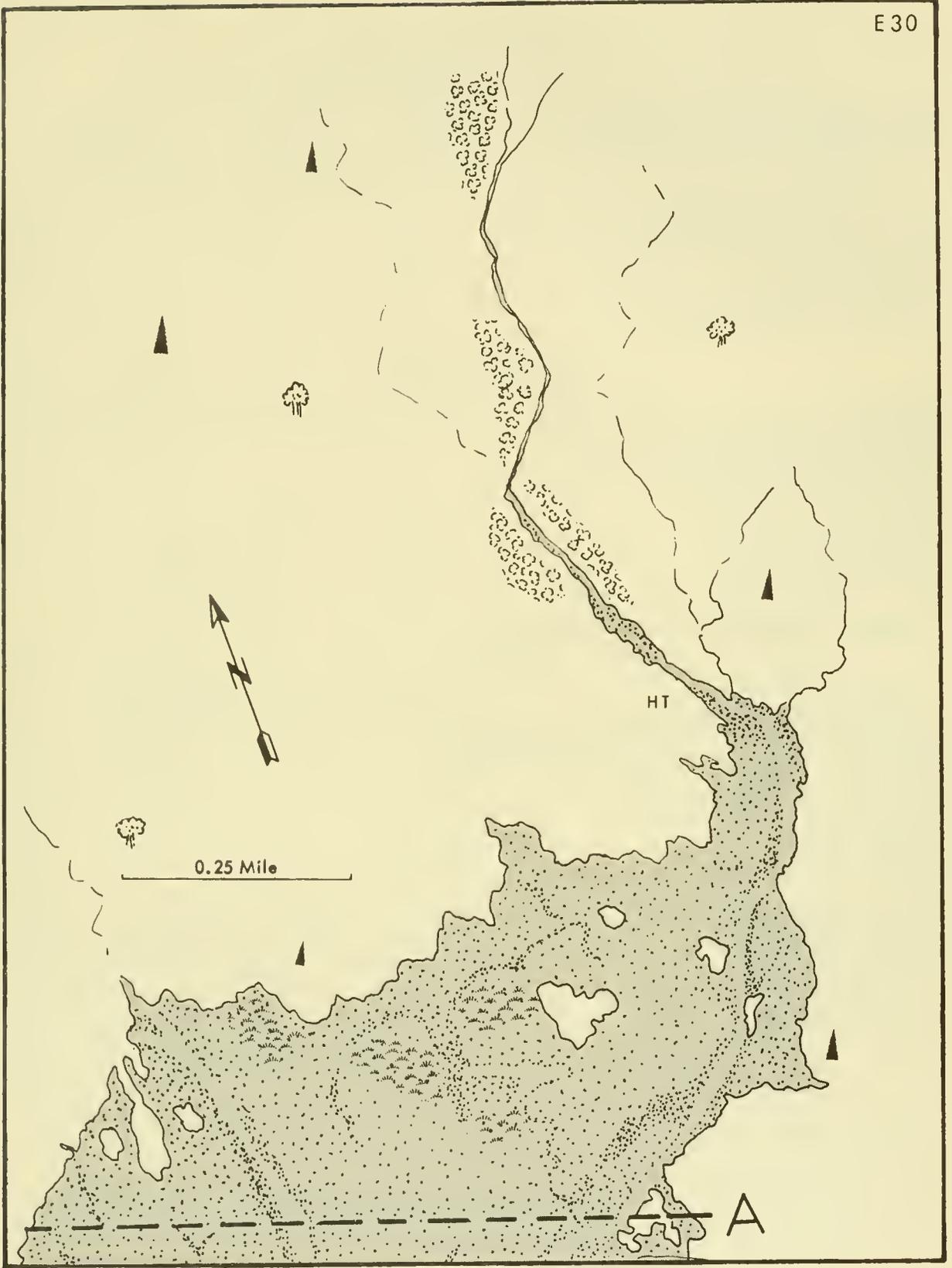
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Aug 20	1.5	FWS	28,000		500			
1947								
Oct 4	G	FWS	35		6			
1948								
Aug 20	G 0.5	FRI			110	31		
Sept 10	G 0.5	FRI	72		248	9		
1950								
July 27	G 0.7	FRI			1			
1953								
Aug 20	A 1.5	FWS	50		250			
Sept 17	G 0.7	FWS	20		37			
1954								
Aug 23	G 0.7	FWS			2			
1955								
	No record							
1956								
Aug 8	G	FWS			4			
Aug 13		FWS	45		65			300 pinks, 700 chums at mouth
Aug 17		FWS			250			1,000 chums at mouth
Aug 21		FWS						3,000-5,000 head of bay
Aug 29		FWS	1,200		500			>1,000 pinks, >1,000 chums at mouth
Sept 7	0.5	FWS	200		200			
Sept 13		FWS	45		65			300 pinks, 700 chums at mouth
1957								
Sept 8	G 0.5	FWS	101		21			
Sept 23	G 0.7	FWS	20		20		1 coho	
1958								
Aug 1	G 0.2	FWS			40			
Aug 8	G 0.7	FWS			300			
Aug 12	G 2.5	FWS	20		280			
Aug 12	G 3.0	FWS			400			
1959								
July 25	G 0.2	FWS			36			
July 28	G 0.2	FWS			100			3,000 pinks in mouth
Aug 10	G 1.0	FWS	275		25			
Aug 11	A 1.0	FWS	1,200		300			300 pinks in salt water
Aug 14	G 3.0	FWS	300					
Season estimate	G	FWS	1,200		200			
1963								
July 16	A IT	ADF						Few jumps at mouth
July 23	G 0.2	ADF						6,000 mixed off mouth
July 29	A IT	ADF						7,000 at mouth
Aug 9	G 0.7	ADF	10					2,000 salmon at mouth; 100 in intertidal zone; fish spawning

A





57°03.3' N. 134°32.3' W.

EASTERN, FREDERICK SOUND, MURDER COVE, E. stream at head of cove.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Normal range. Observed temperatures: 54° F., 8/20/48; 48° F., 9/10/48.

VALLEY DESCRIPTION

DRAINAGE 6.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH 15.5'/7"-18".

GRADIENT AND VELOCITIES Slight.

BOTTOM Small gravel; some bedrock.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES A long, flat intertidal zone.

UPSTREAM

LENGTH ACCESSIBLE 2 miles.

AVERAGE WIDTH/DEPTH 12'/6".

GRADIENT AND VELOCITIES Slow to moderate.

BOTTOM Medium gravel, some bedrock, and clay.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

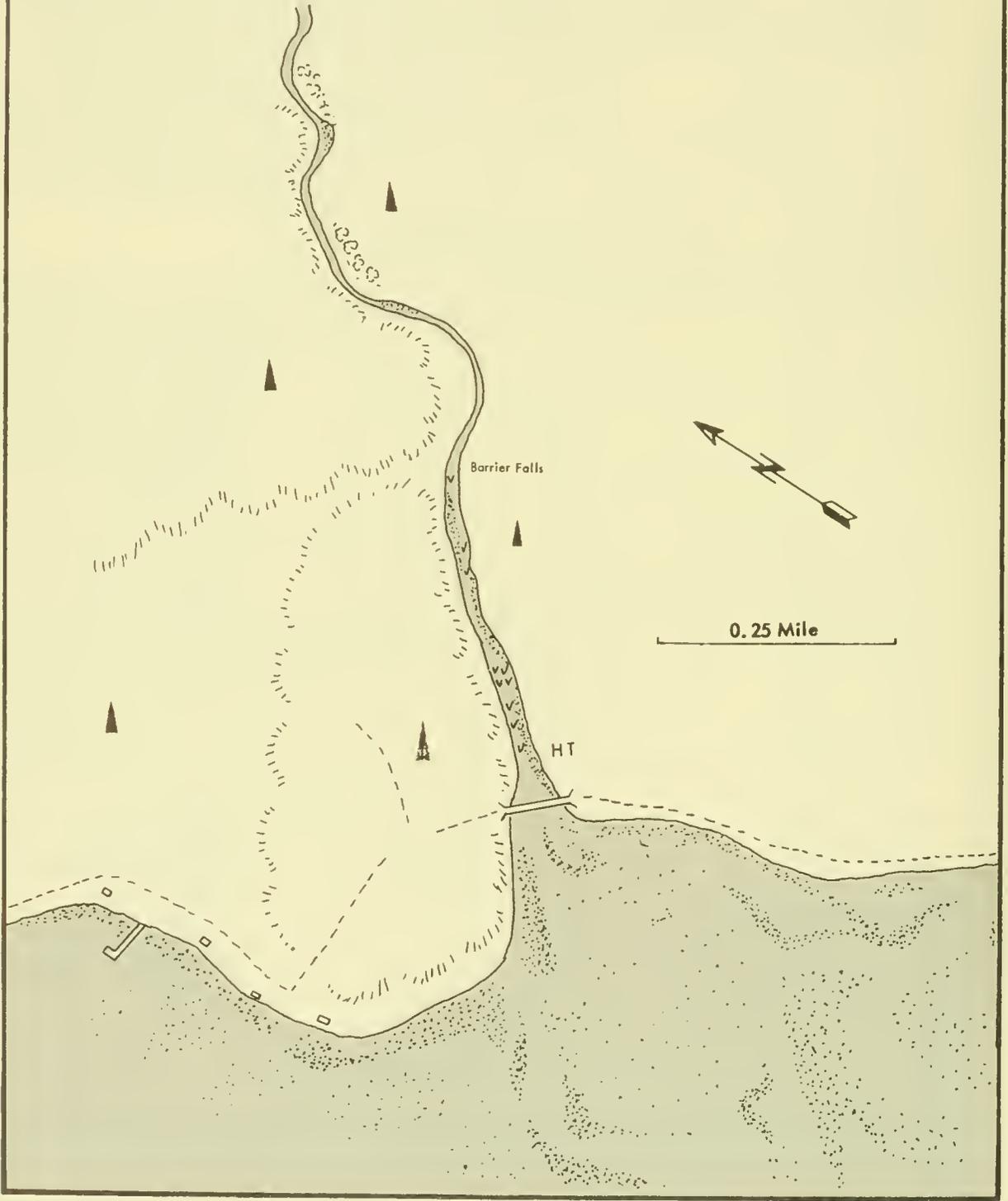
SPAWNING AREAS

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1943								
Sept 10	1.0	FWS	10,000		5,000			
1945								
Sept 22	1.0	FWS	17,500		1,200			
1947								
Oct 4	G 1.5	FWS	25					
1948								
Aug 20	G 0.5	FRI	3					
Sept 10	G 0.5	FRI	74	1	16	9		
1952								
Aug 25	A 1.0	FWS						Fair seeding
1954								
Aug 4	G 4.0	FWS						50 fish in stream
1956								
Aug 13	G	FWS	45		65			300 pinks, 700 chums at mouth
Aug 17	G	FWS			250			1,000 chums at mouth
Aug 29	G	FWS	1,200		500			>1,000 chums, >1,000 pinks at mouth
Sept 7	G 1.0	FWS	1,600		350			
Sept 13	G 0.2	FWS	500					3,000 pinks at mouth
1957								
July 28	A bay	FWS						200 jumpers in bay
Aug 11	A length	FWS						1,000 pinks off mouth
Aug 12	G mouth	FWS						500 chums at mouth
Sept 7	G 0.5	FWS	8		36			
1958								
Aug 1	G 0.2	FWS			40			
Aug 13	G 2.0	FWS			450			
1959								
Aug 17	A 1.0	FWS	150		50			
1961								
July 16	A IT	ADF						No fish observed
July 23	A 1.5	ADF						800 fish at mouth
July 23	G 0.2	ADF						No fish in stream; 6,000 mixed at mouth
Aug 9	G 0.7	ADF	700					2,000 fish at mouth
Aug 29	A IT	ADF						1,500 new fish in inter-tidal zone
Sept- 8	A 0.2	ADF	8,000					



EASTERN, FREDERICK SOUND, CHATHAM STRAIT, KEKU STRAIT, between Kake and Keku Cannery.

MAJOR SPECIES	Pink.	OTHER SPECIES
ESCAPEMENT TIMING		
SPAWNING FACILITIES	Salmon spawn in the extensive tideflat.	
STREAM TEMPERATURES	No observed temperatures.	
VALLEY DESCRIPTION		
DRAINAGE	12 square miles (polar planimeter).	
STREAM MOUTH IDENTIFICATION		
ANCHORAGE		
TRAILS AND SURVEY ROUTES		
AERIAL SURVEY NOTES		

INTERTIDAL ZONE

LENGTH	AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES	
BOTTOM	
LOW TIDE LOCATION	
HIGH TIDE LOCATION	
SCHOOLING AREAS	
SPAWNING AREAS	
GENERAL NOTES	

UPSTREAM

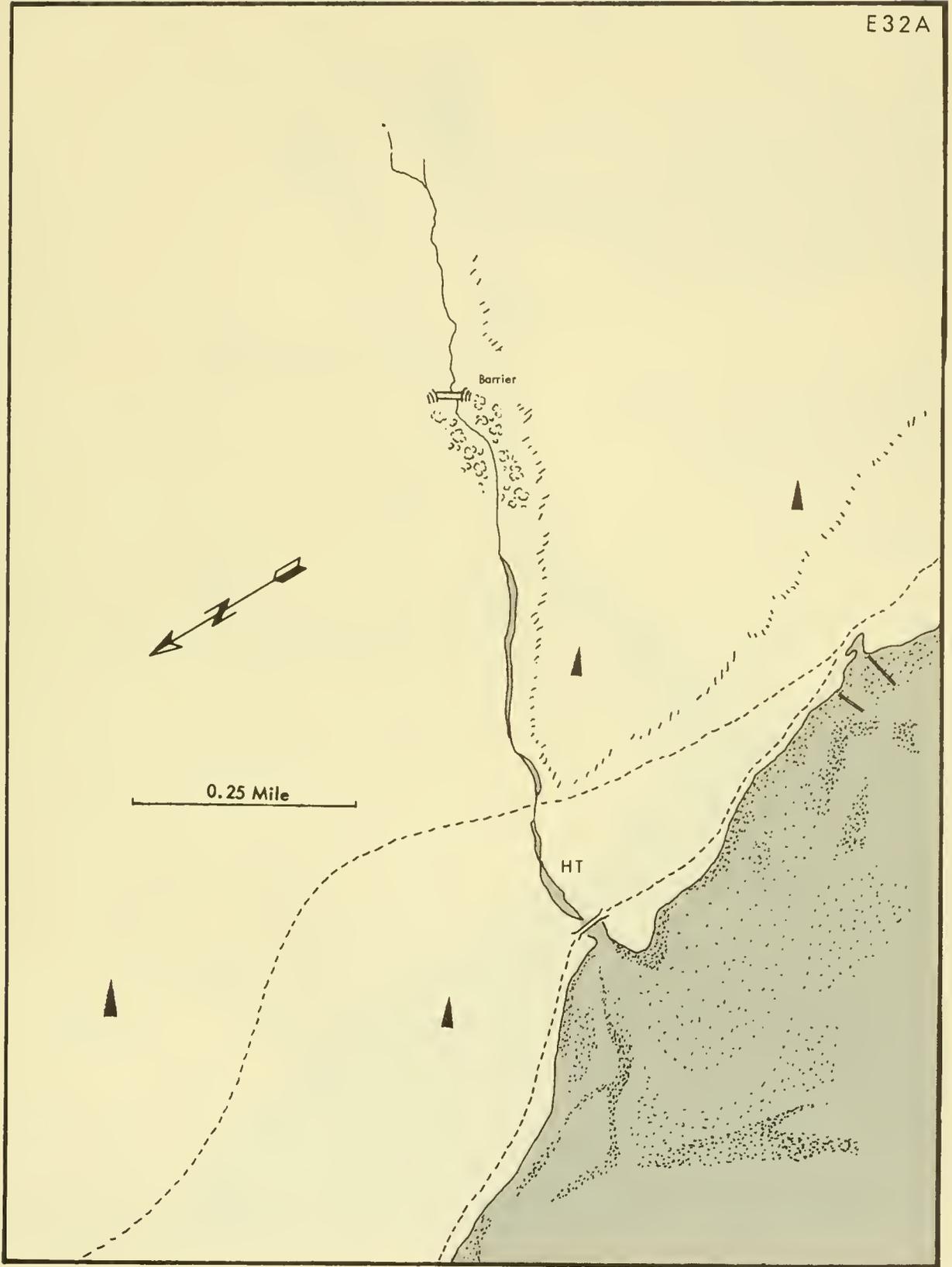
LENGTH ACCESSIBLE	AVERAGE WIDTH/DEPTH	20'/10".
GRADIENT AND VELOCITIES	Moderate.	
BOTTOM	Rock and gravel.	
MARKER DISTANCE		
MARKER IDENTIFICATION		
BARRIERS		
TRIBUTARIES		
SCHOOLING AREAS		
SPAWNING AREAS	Good.	

GENERAL NOTES This stream is the source of water for the Keku Cannery and descends to the Strait from a series of inaccessible falls, under a bridge and through and extensive tideflat.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 16	0.5	FRI	2,500					
1941								
Sept 25	0.5	FRI	15,000					
1949								
Aug 4		FRI	1,000					
1953								
Sept 9	G 0.2	FWS	7		4			
1955								
July 23	A 2.0	FWS	200					
Sept 3	G 1.5	FWS	800					
Sept 14	G 1.5	FWS	1,500					
1956								
Sept 12	2.0	FWS	7,200		800			
1957								
Aug 6	A falls	FWS						25 fish seen
1958								
Aug 8	G 0.2	FWS			200			
Aug 13	G 0.5	FWS	200		250			
Aug 15	G 0.2	FWS	400		800			
Aug 27	G 0.2	FWS	100		150			
Aug 29	A 0.2	FWS	50		100			
1959								
July 23	A 0.2	FWS						No fish observed



56°55.4' N. 133°50.6' W.

EASTERN, FREDERICK SOUND, KEKU STRAIT, first stream S. of E 32.

MAJOR SPECIES
 ESCAPEMENT TIMING
 BOTTOM
 STREAM TEMPERATURES
 VALLEY DESCRIPTION
 DRAINAGE 5.1 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
 GRADIENT AND VELOCITIES
 BOTTOM
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES

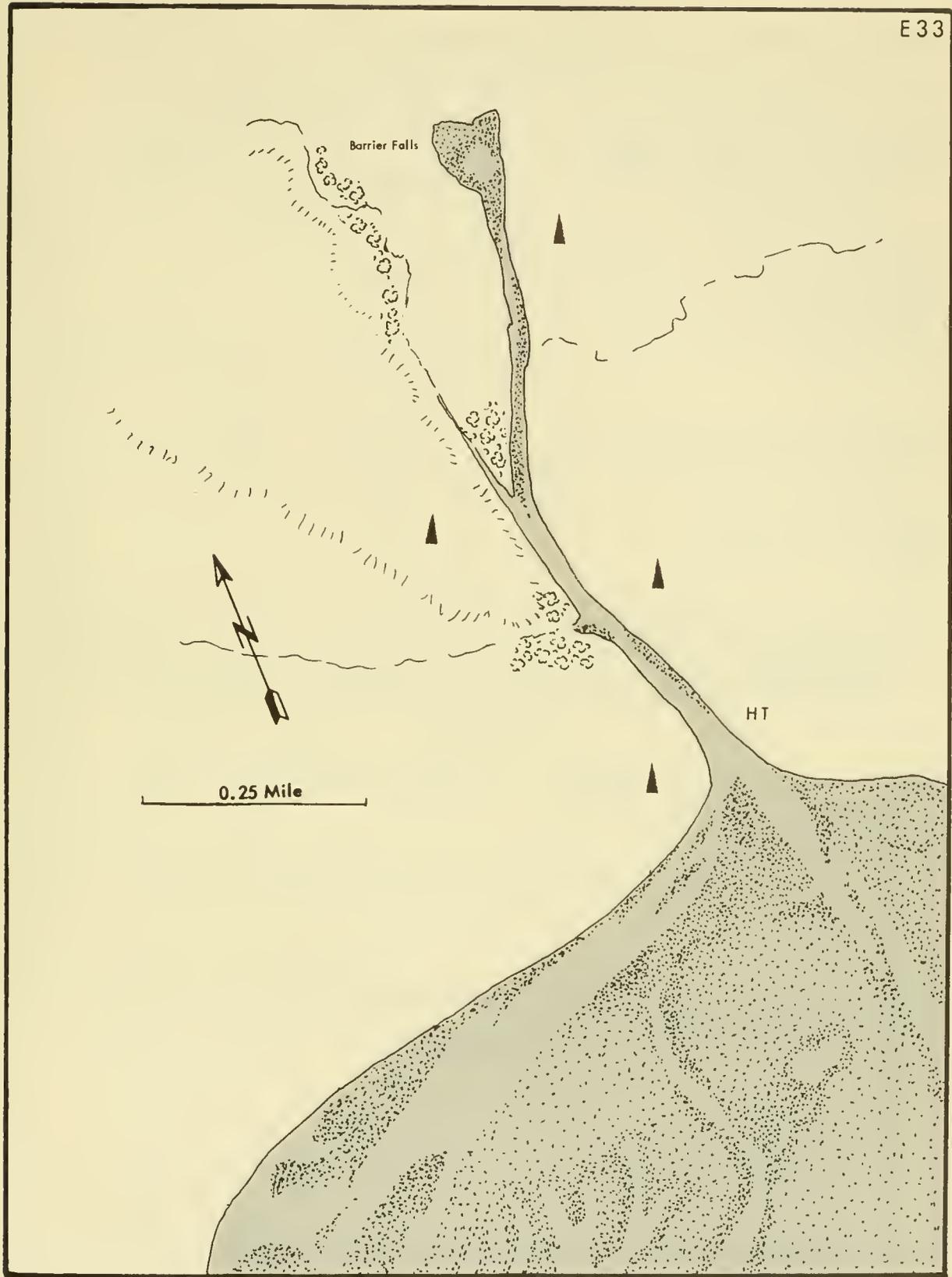
UPSTREAM

LENGTH ACCESSIBLE 0.2 mile. AVERAGE WIDTH/DEPTH 12'/10".
 GRADIENT AND VELOCITIES Moderate.
 BOTTOM Rock and gravel mixtures.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS
 TRIBUTARIES
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES This stream was reported barren in 1946.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941 Sept 25	0.2	FRI	10,000					
1954 Sept 20	G 0.5	FWS	1,300	1,000	400	700		
1953 Sept 9	G 0.7	FWS	30		25			Few dead



EASTERN, FREDERICK SOUND, KEKU STRAIT, HAMILTON BAY, NE. head of bay.

MAJOR SPECIES Pink. OTHER SPECIES Chum.
 ESCAPEMENT TIMING Late, Sept.
 SPAWNING FACILITIES Excellent but limited.
 STREAM TEMPERATURES Cold-normal range. Observed temperatures: 54° F., 9/11/51; 52° F.,
 9/22/51; 48° F., 9/10/52.
 VALLEY DESCRIPTION Large, flat muskeg area.
 DRAINAGE 27.3 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION Extensive tidal flats.
 ANCHORAGE Near head of bay in 4 fathoms.
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES Impossible to survey this stream from the air due to very dark muskeg water.

INTERTIDAL ZONE

LENGTH 0.66 miles to main stream. AVERAGE WIDTH/DEPTH 150'/15".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel with riffles and shallow holes; lower intertidal streambed composed of fine gravel
 and sand.
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS
 SPAWNING AREAS Poor spawning facilities in Section i. All spawning activity in upper 200 yards
 of each split of river. No spawning below.
 GENERAL NOTES The intertidal stream splits at the high tidemark; one split flows directly into the bay
 while the other one joins the intertidal stream #33A. The upper few hundred yards of both splits
 contain excellent spawning riffles with medium to fine gravel of the crushed rock type.

UPSTREAM

LENGTH ACCESSIBLE 0.3 mile to falls. AVERAGE WIDTH/DEPTH 120'/24".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel and boulders.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS There is a spectacular falls about one-third mile upstream from the high tidemark. A large
 hole is under the falls.
 TRIBUTARIES
 SCHOOLING AREAS
 SPAWNING AREAS The upper half of the stream is a continuous riffle of coarse to medium angular
 gravel providing good spawning area.
 GENERAL NOTES The stream pours through high rock cliffs.

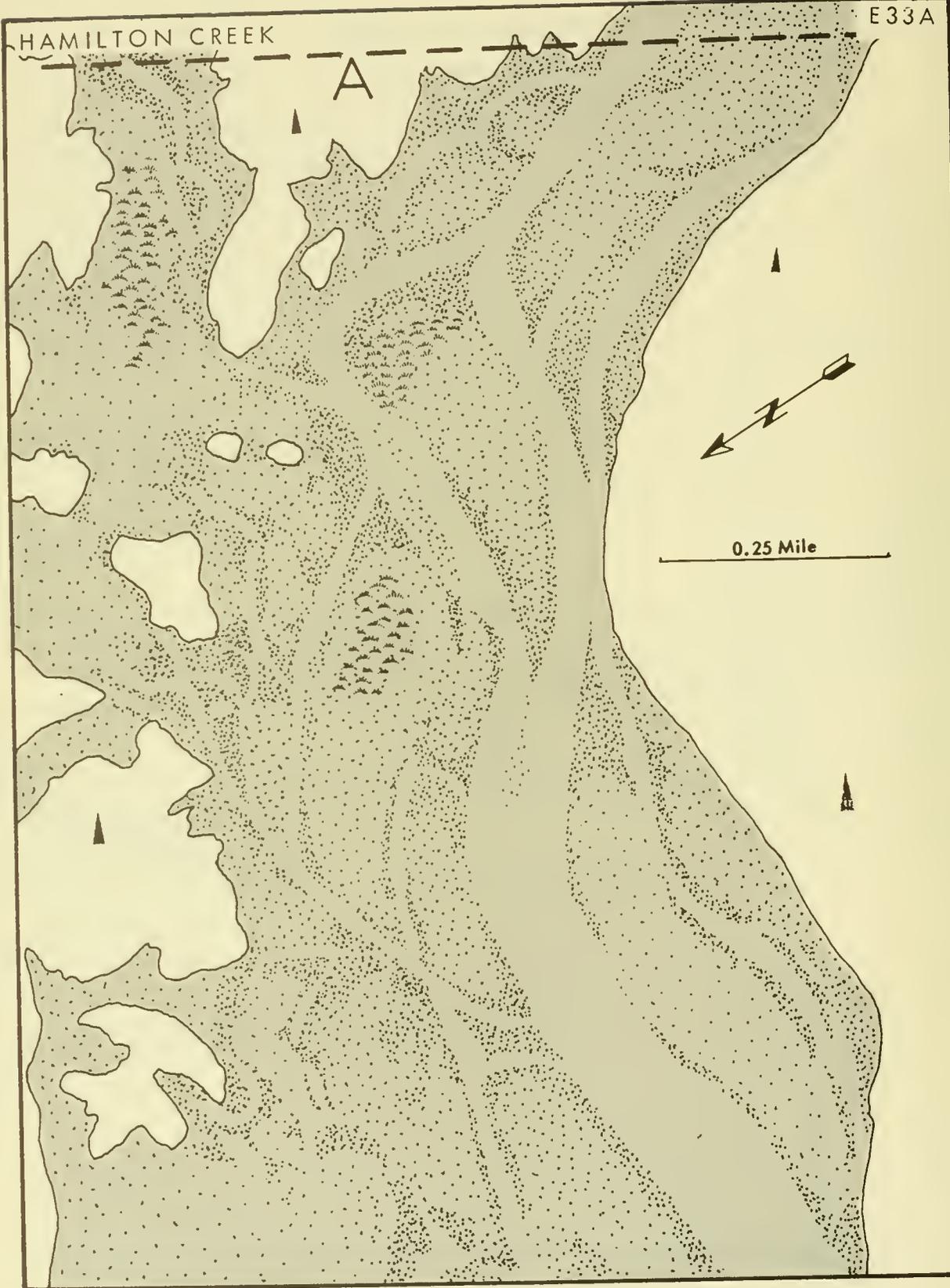
CATHEDRAL FALLS CREEK

ADF STAT. No.
E 33

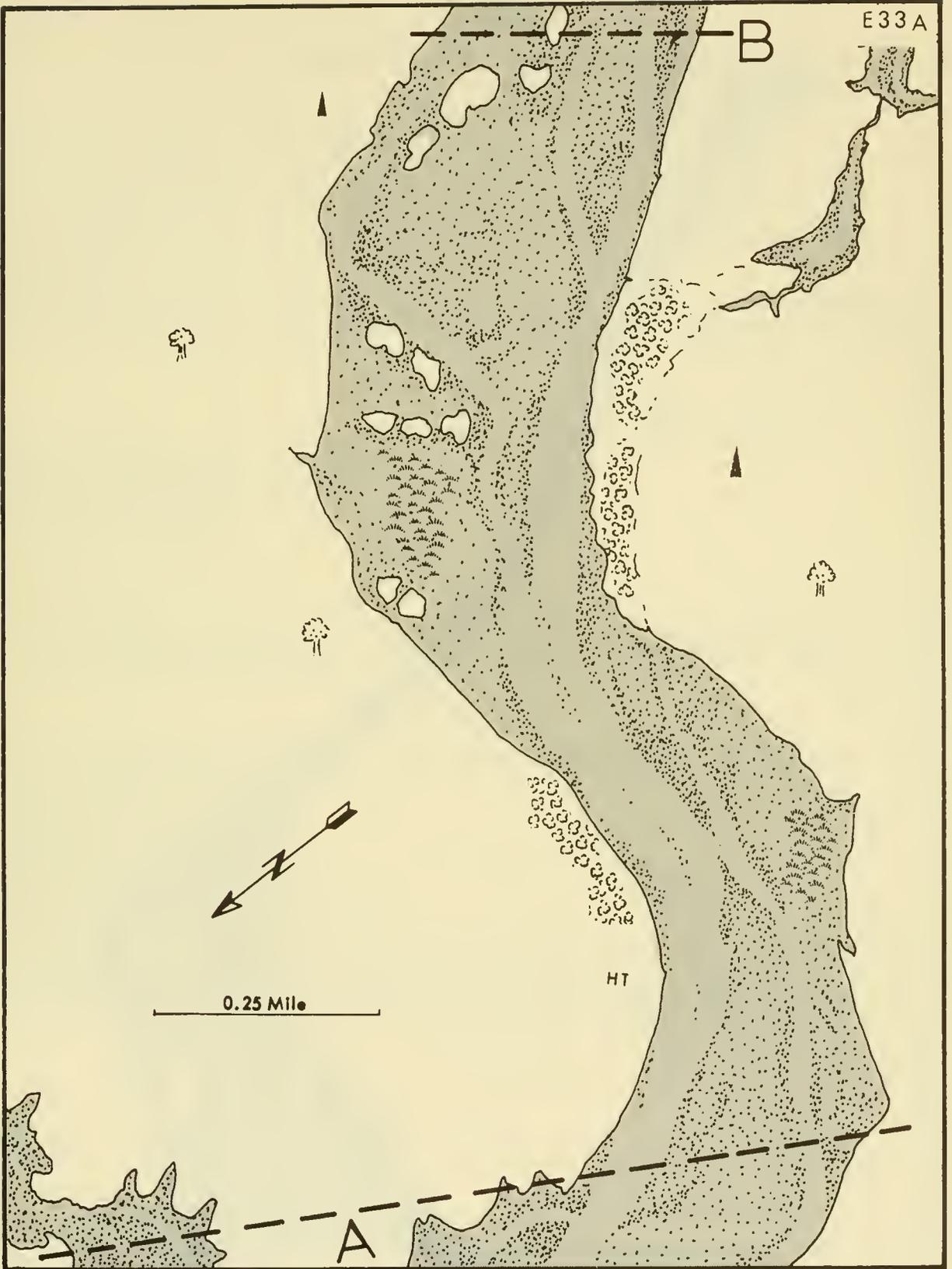
ESCAPEMENT RECORD

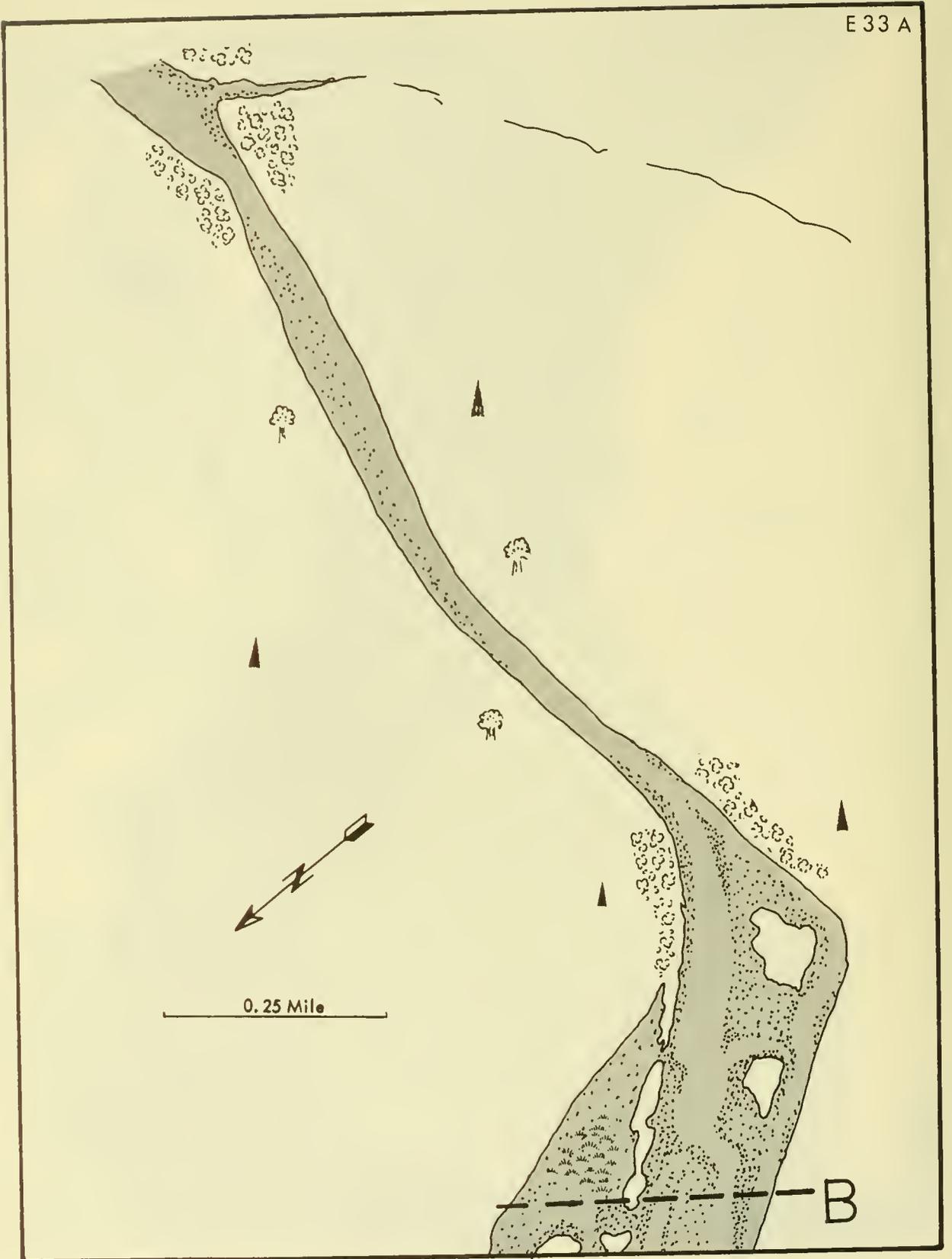
[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Sept 26	1.5	FWS						Some dead fish
1942								
Oct 2	2.0	FWS						Many dead pinks
1947								
Oct 6	To falls	FWS						No fish observed
1949								
Aug 5		FWS						No fish observed
Aug 24		FWS	10,000					
Sept 29		FWS						Few dead pinks
1950								
Aug 31	A	FWS						Poor seeding
Sept 9	2.5	FWS	3,000					
1952								
Sept 10	G 2.0	FWS	2,100	17	13			
1953								
Sept 9	G 0.2	FWS				25		
1956								
Sept 10	G 0.5	FWS	1,470			730		
1957								
Aug 16	A	FWS						No fish observed
1958								
Aug 2	G 0.2	FWS						No fish observed
Aug 9	G 0.2	FWS	300			50		
Aug 15	G 0.2	FWS	400			800		
Aug 29	G 0.2	FWS	1,900			2,400		
1959								
Aug 11	A to falls	FWS						No fish observed
Aug 28	A to falls	FWS						No fish observed



E33 A





S6°53.8' N. 133°43.3' W.

HAMILTON CREEK

ADF STAT. No.

E 33A

EASTERN, FREDERICK SOUND, KEKU STRAIT, HAMILTON BAY, SE. head of bay.

MAJOR SPECIES Pink.

OTHER SPECIES

ESCAPEMENT TIMING Late, Sept.

SPAWNING FACILITIES Excellent spawning gravels.

STREAM TEMPERATURES Cold-range. Observed temperature: 48° F., 9/10/52.

VALLEY DESCRIPTION

DRAINAGE 65.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters Hamilton Bay through fairly extensive grass flats at head of bay.

ANCHORAGE Near the head of bay.

TRAILS AND SURVEY ROUTES Few windfalls. Stream is easy to hike during normal water stages.

AERIAL SURVEY NOTES At low tide the intertidal zone of this stream joins #33 through a maze of small channels.

INTERTIDAL ZONE

LENGTH 2 miles.

AVERAGE WIDTH/DEPTH 200'/12".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Gravel and sand in lower portion.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES A long, meandering stream with many splits and backwater. Upper half composed of medium to fine angular and round gravel. Some deep areas with much silt. Lower portion cuts through extensive tideflats of sand and silt.

UPSTREAM

LENGTH ACCESSIBLE 7 miles.

AVERAGE WIDTH/DEPTH 200'/18" (Av.)

GRADIENT AND VELOCITIES Gentle.

BOTTOM Gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS Holes throughout system.

SPAWNING AREAS Generally good spawning gravel with almost continuous riffles; some boulders and bedrock in upper mile; numerous holes and deep areas.

GENERAL NOTES A mile above high tide, there is one-third mile of extensive splits, bars, riffles, and deep areas. This is a large stream with numerous gravel bars. Primarily a pink stream.

HAMILTON CREEK
ESCAPEMENT RECORD

ADF STAT. No.
E 33 A

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1944								
Sept 23	2.0	FWS	20,000					
1946								
Nov 2		FWS						No fish observed
1947								
Oct 6	3.0	FWS						No fish observed
1949								
Sept 29		FWS						Seeding poor
1950								
Aug 31	A	FWS						Few fish at mouth
1951								
Sept 11	0.3	FWS	300		300			
Sept 22	0.3	FWS	900	1,175	160	150		
1952								
Sept 10	0.3	FWS	476	5	62	3		
1953								
July 20	A 2.0	FWS						50 fish in riffles
Sept 9	G 2.5	FWS	250		10		2 cohos	
1954								
Sept 21	G 1.0	FWS	47					
1955								
Sept 8	G 0.5	FWS	2,000					
Sept 12	G 0.5	FWS	2,000					
Oct 4	G 2.5	FWS	300					
1956								
Sept 16		FWS	5,000					
1957								
Aug 16	A length	FWS						Some fish- doubtful number
Aug 20	G 2.0	FWS	300		200			
1958								
July 18	G 0.2	FWS			50			
July 25	G 0.5	FWS			300			
Aug 2	G 0.2	FWS	300		700			500 pinks and 300 chums off mouth
Aug 5	G 0.2	FWS	600		850			400 pinks and 1,300 chums off mouth
Aug 9	G 0.5	FWS	900		1,200			400 pinks and 300 chums below high tidemark
Aug 15	G 0.5	FWS	1,900		2,000			
Aug 26	A length	FWS						3,000 fish in stream
Aug 29	G 0.2	FWS	450		900			
Aug 29	A 0.2	FWS	300		2,000			
1959								
Aug 1	A 1.0	FWS						>800 in stream - water dark
1962								
Aug 10	A 1.0	ADF						No salmon observed

EASTERN, FREDERICK SOUND, KEKU STRAIT, PORT CAMDEN, SE. head.

MAJOR SPECIES Chum.

OTHER SPECIES

ESCAPEMENT TIMING Late, Sept.-Oct.

SPAWNING FACILITIES Poor spawning areas at low water stages.

STREAM TEMPERATURES

VALLEY DESCRIPTION Low, flat valley between steep mountains. Stream fans out over a half mile tideflat.

DRAINAGE < 2 square miles.

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES A typical chum salmon stream. A third mile back in the valley, the stream ceases to exist and any water flows beneath gravel bars. Survey difficult due to turbulence.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES

BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.3 mile.

AVERAGE WIDTH/DEPTH 30'/10".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Rock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES Rockwell's 1946 report states "stream is an example where logging operations spoiled the salmon run."

PORT CAMDEN CREEK

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 29	0.3	FWS			20,000			25,000 at mouth
1943								
Sept 15	0.3	FWS			15,000			
1947								
Oct 6		FWS			40,000			
1948								
Oct 3		FWS						30,000 at mouth
1953								
Sept 10	G 0.2	FWS			500			
Sept 19	G 0.2	FWS			5,000			
Oct 20	G 0.2	FWS			500			
1954								
Sept 1	G 0.2	FWS			500			
Sept 9	G 0.1	FWS			2,500			
Sept 10	G 0.1	FWS			5,000			
Sept 12	G 0.2	FWS			5,000			
Sept 15	G 0.2	FWS			5,000			
Sept 19	G 0.1	FWS			10,000			
Sept 19	G 0.1	FWS			8,000			
Sept 22	G 0.2	FWS			15,000			
Sept 22	G 0.5	FWS			15,000			
Sept 26	G 0.5	FWS			25,000			
Sept 29	G 0.2	FWS			25,000			
1955								
Sept 25	G 0.5	FWS						1,000 chums at mouth
Oct 5	G 0.2	FWS	3,500					25 chums at mouth
1956								
Sept 11	G 0.2	FWS			50			
Oct 1	G 0.1	FWS			40,000	2,000		
1957								
Sept 21	G 0.2	FWS			6,000			5,000 at mouth
Sept 25	G 0.1	FWS			33,000			20,000 at mouth
1958								
Aug 29	A length	FWS						No fish observed
Sept 12	G 0.2	FWS			400			
Sept 15	G	FWS			1,000			Tidal zone
Sept 16	G 0.5	FWS			4,500			1,000 chums off mouth
Sept 25	G 1.0	FWS			7,000			1,000 dead
1959								
Sept 14	G 0.5	FWS			1,800			3,000 chums in tidal zone
Sept 23	G 1.0	FWS			15,000			
Sept 25	G 0.5	FWS			1,600			1,000 chums on tideflats
Oct 10	G 0.5	FWS			5			
1960								
Aug 25	A mouth	ADF						No fish observed
Sept 6	A 0.5	ADF						No fish observed
Sept 26	G mouth	ADF			75			
Sept 26	A length	ADF						No fish observed

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1961								
Sept 9	A 0.5	ADF			600			600 at mouth
Sept 14	A length	ADF			500			25 chums at mouth
Oct 5	A length	ADF			200			
1962								
Sept 18	A bay	ADF						Scattered jumps; turbulent water
Sept 28	A mouth	ADF						Too rough for survey
1963								
Aug 29	A	ADF						500 chums at mouth
Oct 3	G length	ADF						160 chums in intertidal zone

S6° 38.7' N. 134° 03.3' W.

EASTERN, FREDERICK SOUND, PORT CAMDEN, SW. arm, head.

MAJOR SPECIES Chum. OTHER SPECIES Coho.
ESCAPEMENT TIMING Late, Sept. to Nov.
SPAWNING FACILITIES Excellent.
STREAM TEMPERATURES
VALLEY DESCRIPTION Flat with beaver marshes; extends to Pillar Bay.
DRAINAGE Estimated about 1 square mile.
STREAM MOUTH IDENTIFICATION Extensive tidal mudflats.
ANCHORAGE Off flats.
TRAILS AND SURVEY ROUTES Can be waded at most stream levels.
AERIAL SURVEY NOTES Easy to survey.

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES Moderate.
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS

SPAWNING AREAS In upper tidal area, and lower reaches of mudflats.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.2 mile. AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM Fine gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS Beaver dams are a continuous problem.
TRIBUTARIES None of importance.
SCHOOLING AREAS Few.

SPAWNING AREAS Limited but of excellent quality.

GENERAL NOTES Stream has been unbelievably good producer in past, supporting heavy "fall fishing" for late chums. Has been poor in the past few years despite complete closure. Natives report heavy subsistence take before white man's fisheries developed. Many old smoke houses still exist.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1953								
Oct 20	G 0.2	FWS			1,500			
1954								
Sept 17	G 0.2	FWS			2,000			
Sept 22	G 0.2	FWS			4,000			
Sept 29	G 0.2	FWS			9,000			
1955								
Aug 3	G 0.2	FWS	10					
1956								
Oct 1	0.5	FWS			10,000	150		
1957								
Sept 17	G	FWS			2,500			
Sept 22	G 0.2	FWS			3,000			10,000 at mouth
Sept 25	G 0.2	FWS			15,000			
Oct ?	G 0.2	FWS			800			Thousands dead
Oct 14	G 0.2	FWS			9,000	70,000		
Nov 10	G 0.5	FWS						No fish observed
1958								
Sept 12	G 0.2	FWS			4			
Sept 17	G 0.5	FWS			400			
Sept 25	G 0.5	FWS			1,500	125		500 at mouth
1959								
Sept 15	G 0.2	FWS						1,200 chums in tidal zone
Sept 23	G to							
	beaver dam	FWS						1,500 chums in tidal zone
Oct 3	G 0.5	FWS	600					12 dead fish
Oct 10	G	FWS						12 dead fish
1960								
Aug 25	A length	ADF						No fish observed
Sept 4	A length	ADF						No fish observed
Sept 22	A length	ADF						No fish observed; no jumps in bay
1961								
Sept 8	A length	ADF						500 schooled at mouth
Sept 9	A length	ADF			3			3 schools, 800 at mouth
Sept 14	A length	ADF						5,000-6,000 off mouth
Sept 28	A length	ADF						2,000 dead off mouth
Oct 5	A length	ADF			300			
1962								
Sept 18	A length	ADF			11,000			
Sept 28	A length	ADF						6,000-7,000 in intertidal zone
1963								
Aug 29	A length	ADF						No fish observed; stream dry; no jumps
Oct 3	G length	ADF			32			Adequate water

EASTERN, FREDERICK SOUND, PORT CAMDEN, E. shore.

MAJOR SPECIES	OTHER SPECIES
ESCAPEMENT TIMING	
SPAWNING FACILITIES	
STREAM TEMPERATURES	
VALLEY DESCRIPTION	
DRAINAGE 12.2 square miles (polar planimeter).	
STREAM MOUTH IDENTIFICATION	
ANCHORAGE	
TRAILS AND SURVEY ROUTES	
AERIAL SURVEY NOTES	

INTERTIDAL ZONE

LENGTH	AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES	
BOTTOM	
LOW TIDE LOCATION	
HIGH TIDE LOCATION	
SCHOOLING AREAS	
SPAWNING AREAS	
GENERAL NOTES	

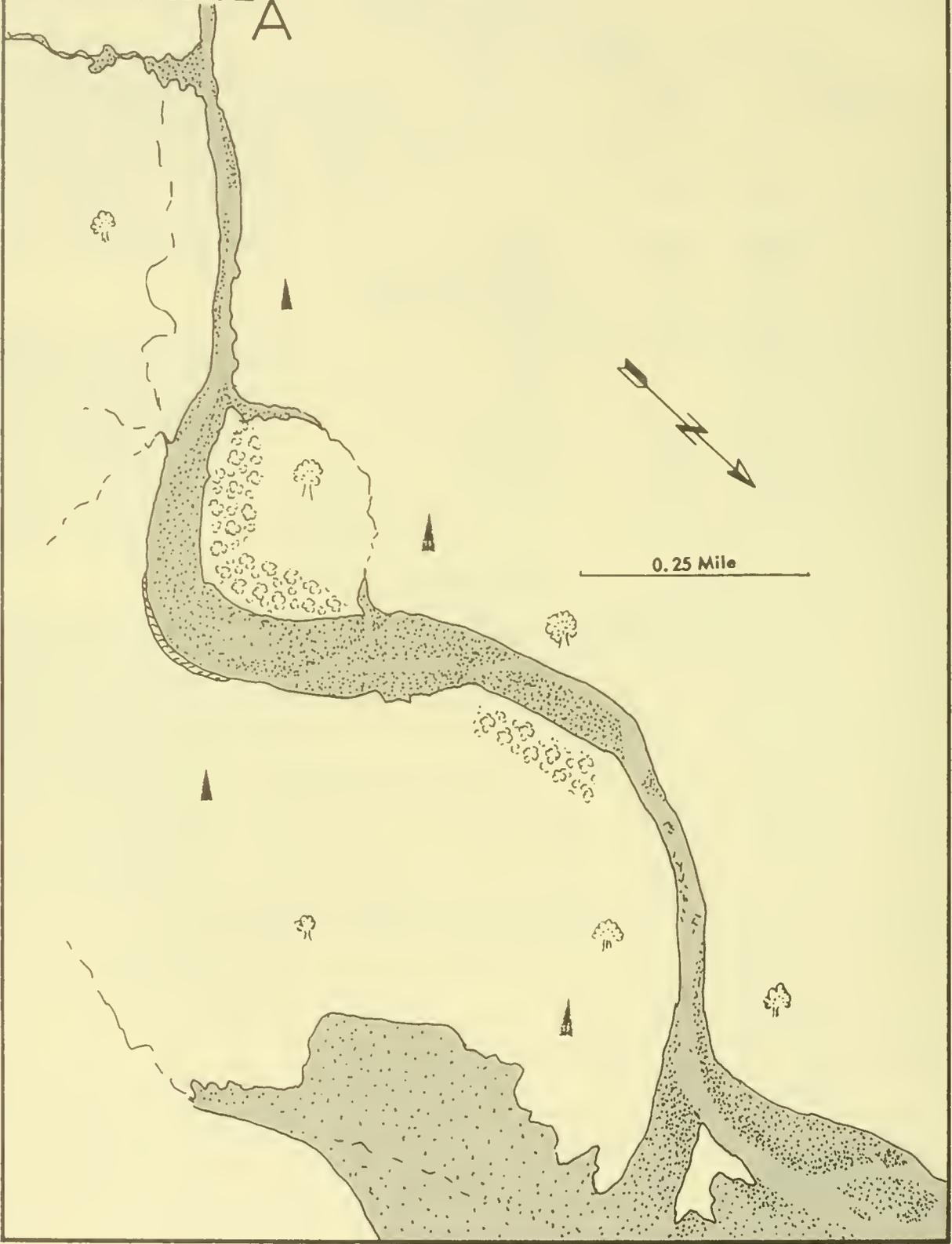
UPSTREAM

LENGTH ACCESSIBLE	AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES	
BOTTOM	
MARKER DISTANCE	
MARKER IDENTIFICATION	
BARRIERS	
TRIBUTARIES	
SCHOOLING AREAS	
SPAWNING AREAS	
GENERAL NOTES	

ESCAPEMENT RECORD

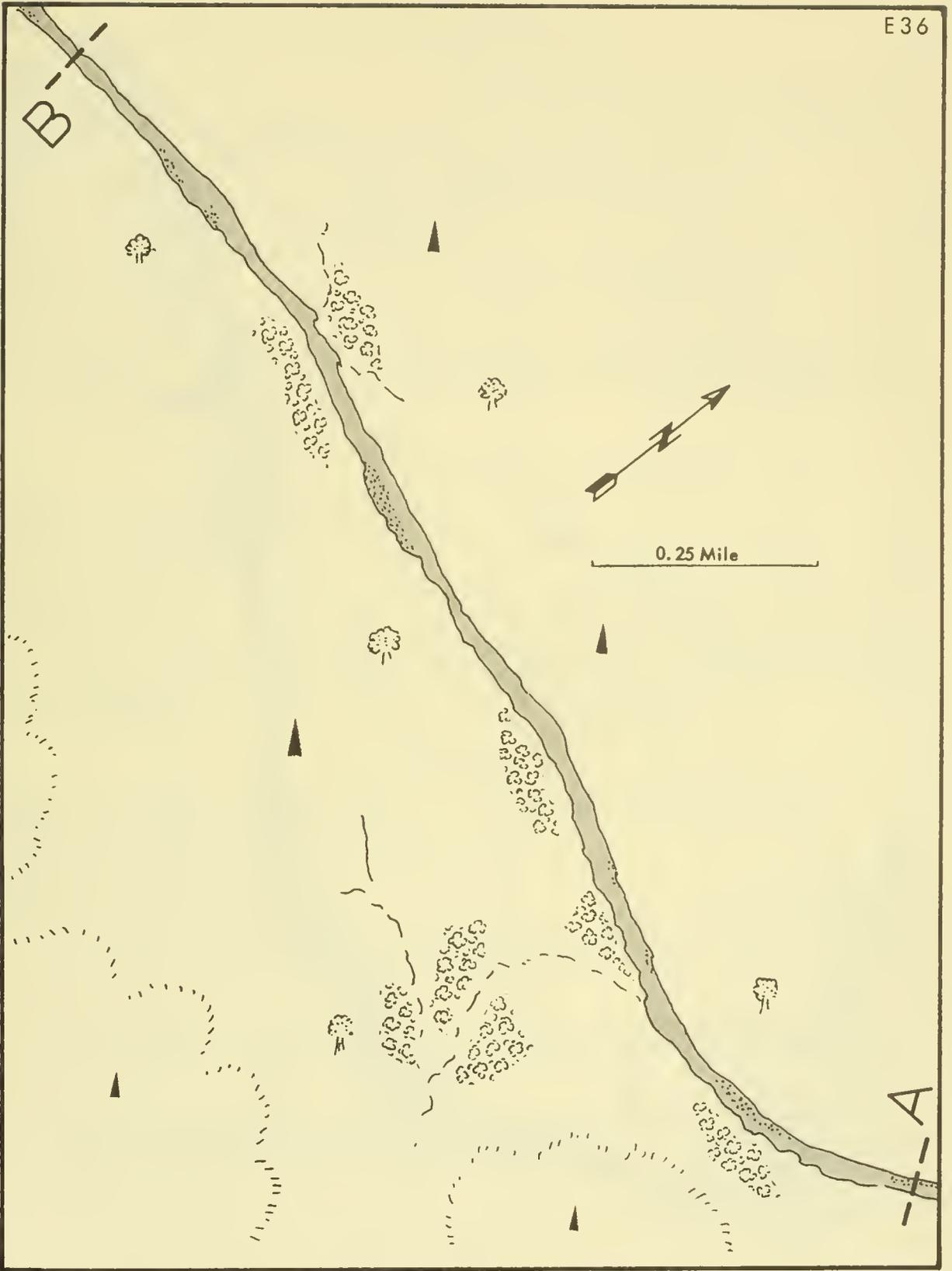
[Counts made by ground surveys are designated by G; aerial surveys by A]

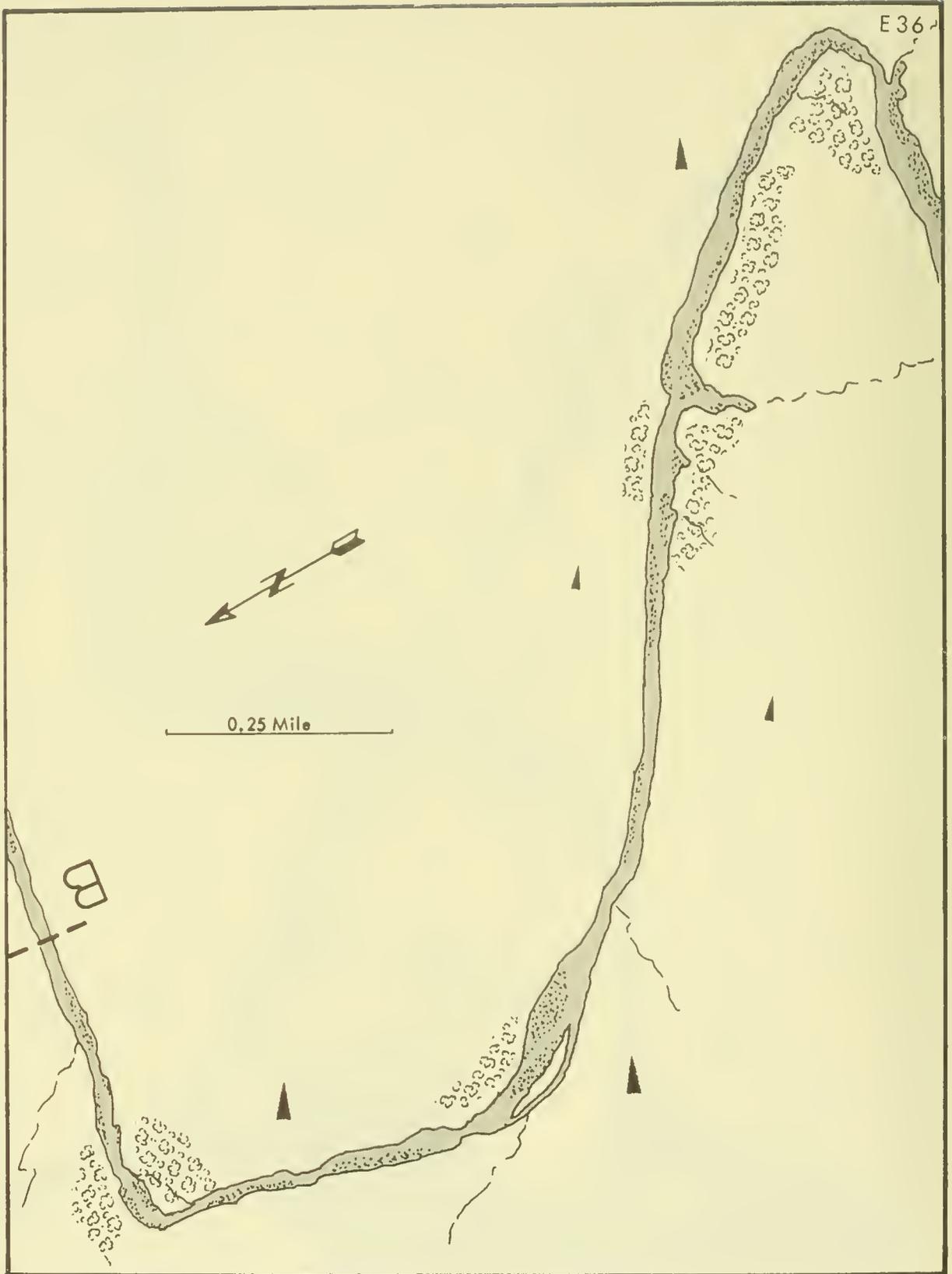
Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1955								
Sept 6	G 0.5	FWS	1,000					
1956								
Sept 11	0.5	FWS	1,920		1,280			
Oct 1		FWS	150	600	250	300		
1957								
Sept 18	G 0.2	FWS	200		1,800			
Sept 22	G 0.7	FWS			2,620			
Oct 12	G 0.2	FWS						No fish observed
1958								
Aug 29	A to falls	FWS			140			
Sept 13	G 0.2	FWS			1,500			150 chums off mouth
Sept 16	G 1.5	FWS	100		350	150		
1959								
Sept 15	G 0.5	FWS	775		25			No dead



+

E36





EASTERN, FREDERICK SOUND, KEKU STRAIT, KADAK BAY, Head.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho, trout, steelhead.
 ESCAPEMENT TIMING Middle.
 SPAWNING FACILITIES Excellent spawning riffles in first half mile. Intertidal zone affords only limited spawning facilities.
 STREAM TEMPERATURES Warm range. Observed temperature: 56° F., 9/7/53.
 VALLEY DESCRIPTION Broad, heavily timbered valley. Flat muskeg valley.
 DRAINAGE 51.5 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION Enters Kadak Bay through an extensive mudflat in the SW. corner of the bay.
 ANCHORAGE Anchorage is available at the mouth of Kadak Bay in 8 fathoms of water.
 TRAILS AND SURVEY ROUTES At normal water levels, large bars are exposed and the stream is easy to travel.
 AERIAL SURVEY NOTES The lower half mile of the stream is subject to extreme flooding as evidenced by large, high bars, deep holes, and huge windfalls piled up on the bars. Discolored water usually makes surveying difficult.

INTERTIDAL ZONE

LENGTH At low tide 1.7 miles. AVERAGE WIDTH/DEPTH 30'/10".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel, silt, and algae.
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS Schooling is done primarily off the mouth of the stream due to fairly shallow intertidal area.
 SPAWNING AREAS The stream affords limited spawning facilities. The upper 0.1 mile is quiet and deep with much silt and algae. Below this, there is about a half mile of occasional short spawning riffles with medium to large angular gravel and considerable algae.
 GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE Estimated 7 miles. AVERAGE WIDTH/DEPTH 30'/10".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel, sand, and silt; some bedrock and boulders.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS Several large windfalls and large gravel bars.
 TRIBUTARIES This is a very large stream entering the bay in 2 branches. About 2.5 miles from the high tidemark, there is a fairly large tributary to the main stream.
 SCHOOLING AREAS Some deep pools in first half mile.
 SPAWNING AREAS Excellent riffles of medium to coarse, angular gravel in first half mile. Then a half mile of shallow, quiet water with fine gravel, sand, and silt. Excellent spawning riffles above this; medium, angular gravel on riffles and occasional pools.
 GENERAL NOTES This is one of the key streams of this area and can be considered a heavy producer. A Forest Service cabin is at the head of the tidewater on the S. bank. This system was mapped and surveyed in 1962 by ADF&G Biological Research Division.

KADAK CREEK

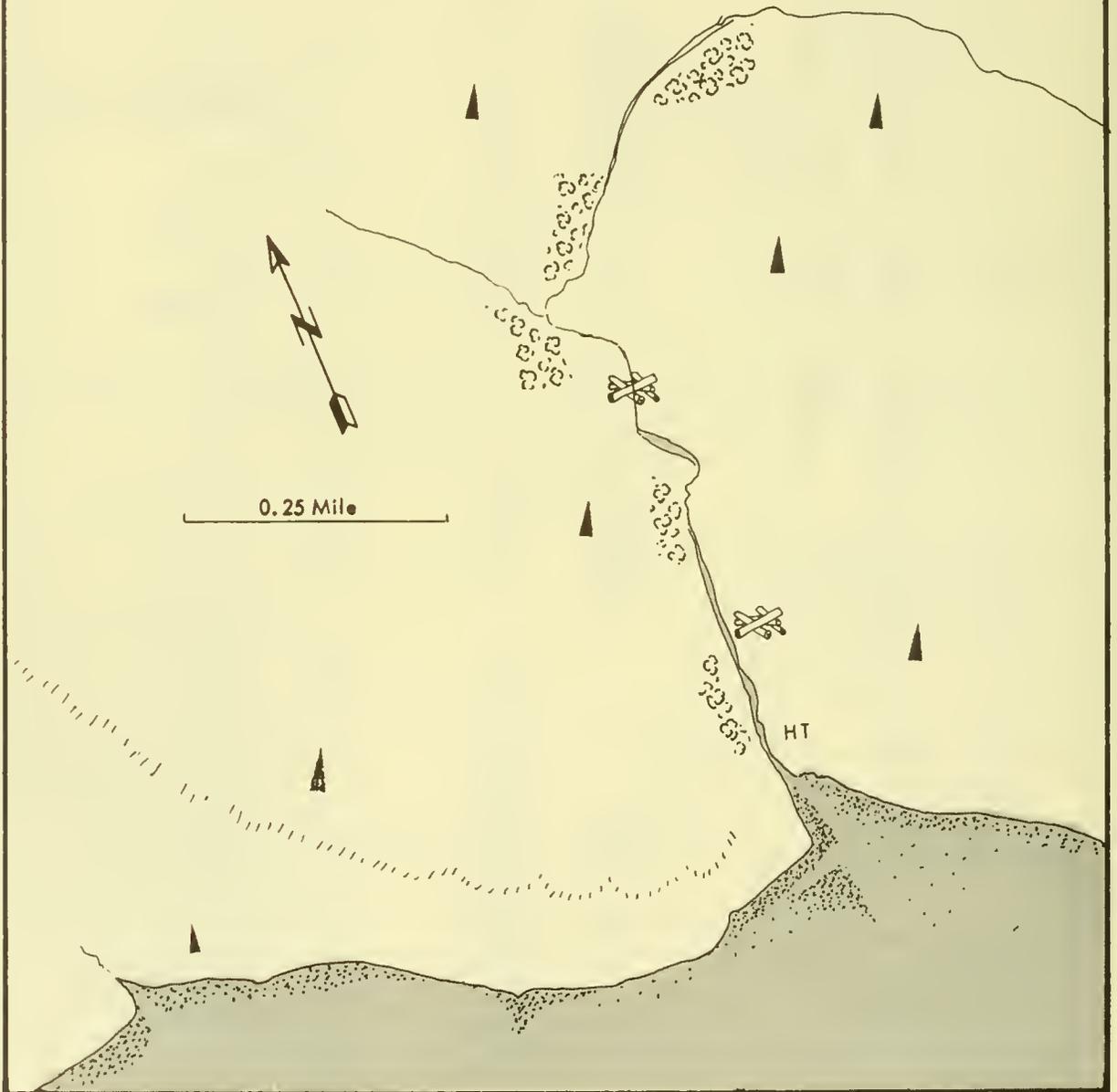
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Aug 25		FWS	40,000					
1941								
Sept 26	3.0	FWS	73,600		9,000			1,000 cohos at mouth
1942								
Sept 30	1.5	FWS	75,000		5,000			500 at mouth
1943								
Sept 15	3.0	FWS	60,000		40,000			50,000 at mouth
1944								
Sept 24	0.5	FWS	20,000					Seeding fair
1945								
Sept 26	1.0	FWS	200,000		5,000		1,500 cohos	
1946								
Oct 2	1.0	FWS	100,000		10,000		500 cohos	
1947								
Oct 6	1.5	FWS	100		12,000			
1948								
Aug 25		FWS	500		1,000			
Oct 3	1.5	FWS	150		2,000			
1949								
Aug 5	A	FRI	1,000					
Aug 31	A	FRI	100,000					
Sept 29	A	FRI	50,000					
1953								
Aug 5	A 4.0	FWS	1,500		500			
Sept 7	A 1.2	FRI	6,300	S	85	10		Exploratory survey
Sept 10	G 1.0	FWS	1,500		200			
1954								
Sept 9	6.0	FRI	9,000		some			8,000 pinks at mouth
Sept 17	5.0	FRI	13,000		none			None off mouth
1955								
July 10	G 0.7	FWS	18		6			
July 15	G 1.2	FWS	200		100			
July 22	G 1.5	FWS	750		1,000			
July 23	A 2.0	FWS	200					
July 25	G 2.5	FWS	1,000		2,000			
July 30	G 1.5	FWS	2,000		5,000			
Aug 1	A 4.0	FWS	3,500		1,500			None at mouth
Aug 1	0.1	FWS	2,000		7,000			
Aug 4	G 1.5	FWS	3,000		10,000			
Aug 8	G 0.5	FWS	3,500		10,000			
Aug 11	G 0.5	FWS	3,500		8,000			
Aug 15	G 1.0	FWS	4,000		5,000			
Aug 18	G 1.0	FWS	8,000		4,000			
Aug 21	G 0.5	FWS	15,000		1,000			5 pinks at mouth
Aug 24	G 0.5	FWS	25,000		1,000			8 pinks at mouth
Aug 30	G 0.5	FWS	75,000		1,000			8 pinks at mouth
Sept 4	G 1.0	FWS	25,000					
Sept 6	G 1.0	FWS	90,000		1,000			8 pinks at mouth
Sept 9	G 1.0	FWS	5,000					8,000 pinks at mouth

ESCAPEMENT RECORD

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
July 21	G 0.2	FWS			30			
Aug 1	0.2	FWS			4			
Aug 4	1.0	FWS			25			
Aug 11	1.0	FWS	125		30			
Aug 15	1.0	FWS	500					
Aug 26	1.0	FWS	2,000					
Aug 29	7.0	FWS	4,356		132			
Sept 2	0.5	FWS	3,000					
Sept 5	0.5	FWS	9,000		1,000			
Sept 7	1.0	FWS	10,000		1,000			
Sept 10	1.0	FWS	12,000		1,000			
Sept 11	2.0	FWS			13,000			5,000 pinks at mouth
Sept 12	1.0	FWS	11,000		1,000			
Sept 15	1.0	FWS	12,500		2,000			
Sept 16	2.0	FWS	2,250		12,750			
Sept 18	1.0	FWS	8,500		3,000			
1957								
July 24	G 2.0	FWS	3,000					
July 25-29	G 6.0	FWS	3,000		500			
Sept 4	A 1.5	FWS	5,000		1,000			1,000 in bay
1958								
Aug 26	A 1.0	FWS	4,000					
Aug 29	A 2.0	FWS	4,500					
Sept 12	A length	FWS	5,000					
Sept 16	G 0.7	FWS	30		4			
Sept 17	G 1.5	FWS	40		65			
1959								
July 19	G 0.1	FWS	60		50			
July 25	G 0.2	FWS	2,500		800			
Aug 2	G 0.2	FWS	1,000		1,500			
Aug 9	G 0.2	FWS	1,500		1,200			
Aug 16	G 0.1	FWS						No fish observed
Aug 22	G 0.5	FWS	3,000		1			No dead
1960								
Aug 29	A 0.5	ADF						Pinks present
1961								
July 23	A 0.2	ADF						500-600 salmon at mouth
Aug 17	A 2.0	ADF	1,000					5,000 in intertidal zone
1962								
July 28	A 3.0	ADF			100			50 in intertidal zone
Aug 8	G 13.0	ADF			50		300 cohos	8,000 pinks at mouth
Aug 10	A 1.0	ADF						Stream dark, heavy rain
1963								
Aug 9	A 4.0	ADF	8,000		300			None at mouth; 200 in intertidal zone
Aug 29	A 1.0	ADF						3,000 in intertidal zone; peak of run past



EASTERN, FREDERICK SOUND, SAGINAW BAY, 4 miles from head on N. shore.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING
SPAWNING FACILITIES Negligible.
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS

AVERAGE WIDTH/DEPTH

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Rocky; some gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS

AVERAGE WIDTH/DEPTH 14'8".

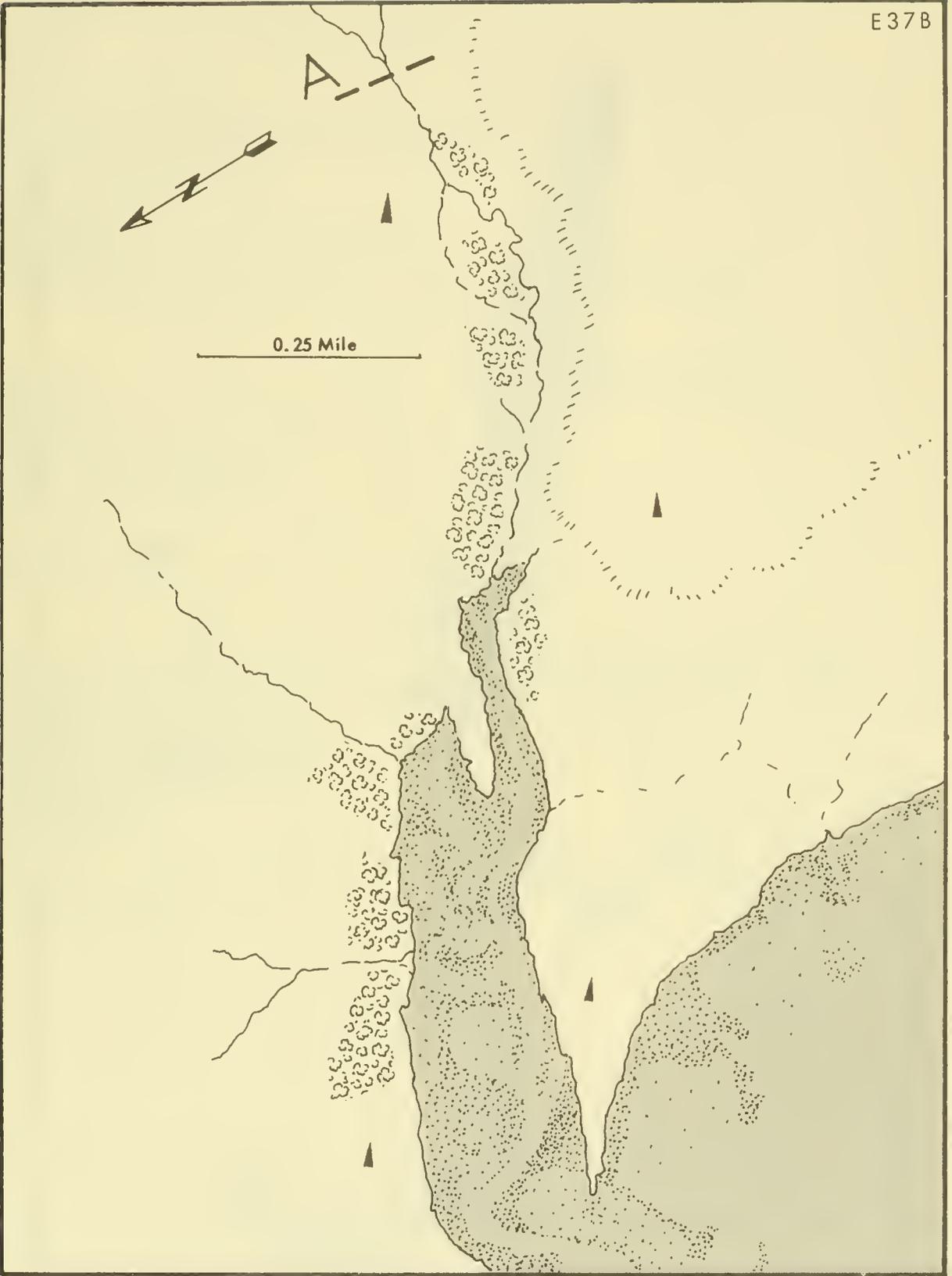
SPAWNING AREAS Poor.

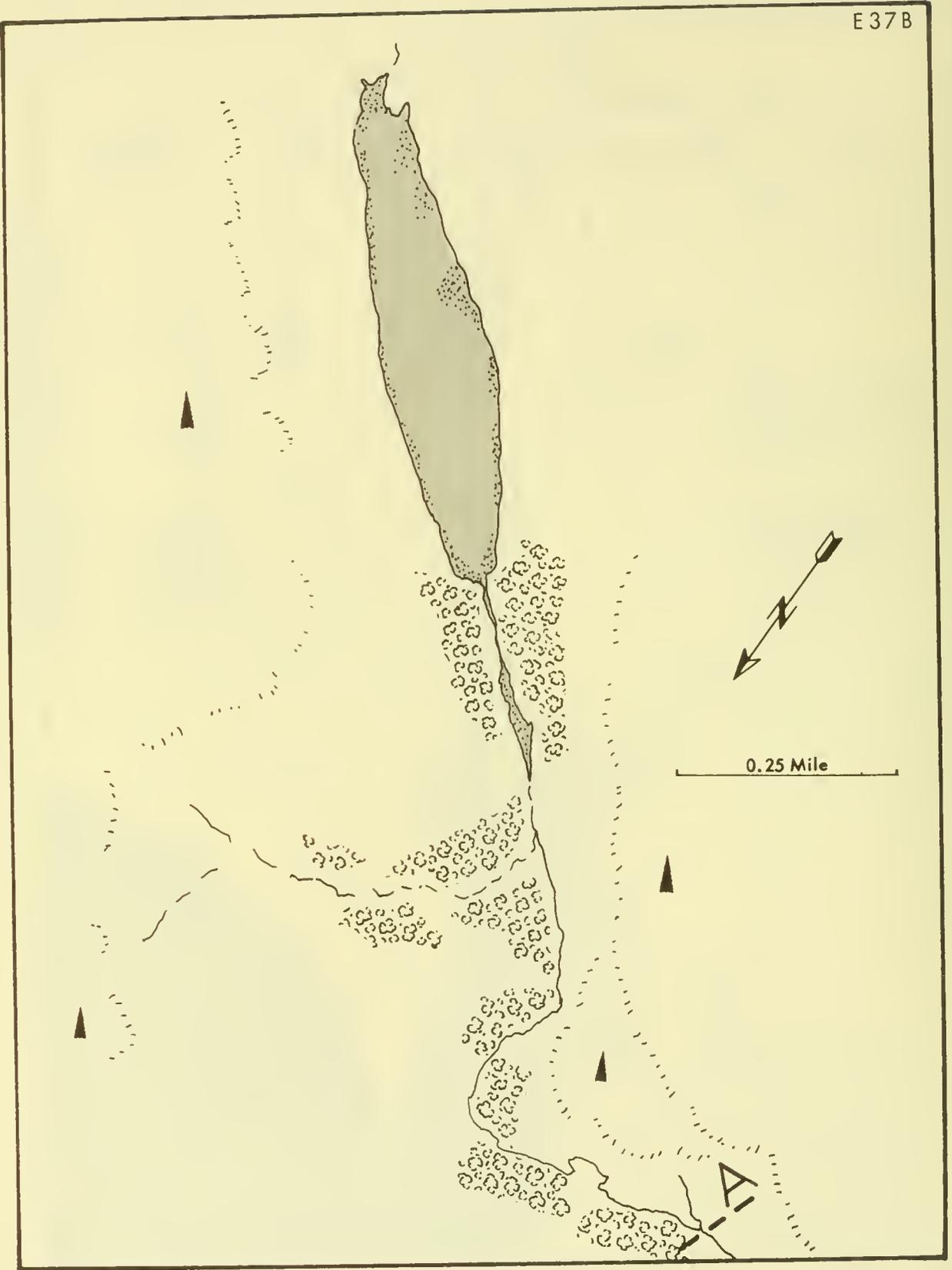
GENERAL NOTES This stream is so very small that its value as a spawning area is negligible.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Sept 24	0.1	FWS	1,000					
1942								
Sept 26	0.1	FWS	300					
1955								
Sept 4	G 0.5	FWS	2,000					
Sept 5	G 0.5	FWS	5,500					
1956								
Aug 14		FWS						Pinks school at mouth
Aug 30		FWS						No fish observed
Sept 6	0.2	FWS						3,000 pinks, 1,000 chums at mouth
Sept 13		FWS	300					
1957								
July 24-31	G 1.0	FWS						No fish observed
Aug 17	A 1.0	FWS						No fish observed
Sept 13	A bay	FWS						No fish observed
1958								
Aug 10	G 0.2	FWS						No fish observed





EASTERN, FREDERICK SOUND, SAGINAW BAY, 3 miles from head on N. shore.

MAJOR SPECIES	Pink.	OTHER SPECIES
ESCAPEMENT TIMING		
SPAWNING FACILITIES	Small but fairly good spawning stream.	
STREAM TEMPERATURES		
VALLEY DESCRIPTION		
DRAINAGE		
STREAM MOUTH IDENTIFICATION		
ANCHORAGE		
TRAILS AND SURVEY ROUTES	Easy to examine unless at high flood stage.	
AERIAL SURVEY NOTES		

INTERTIDAL ZONE

LENGTH	AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES	
BOTTOM	
LOW TIDE LOCATION	
HIGH TIDE LOCATION	
SCHOOLING AREAS	
SPAWNING AREAS	
GENERAL NOTES	

UPSTREAM

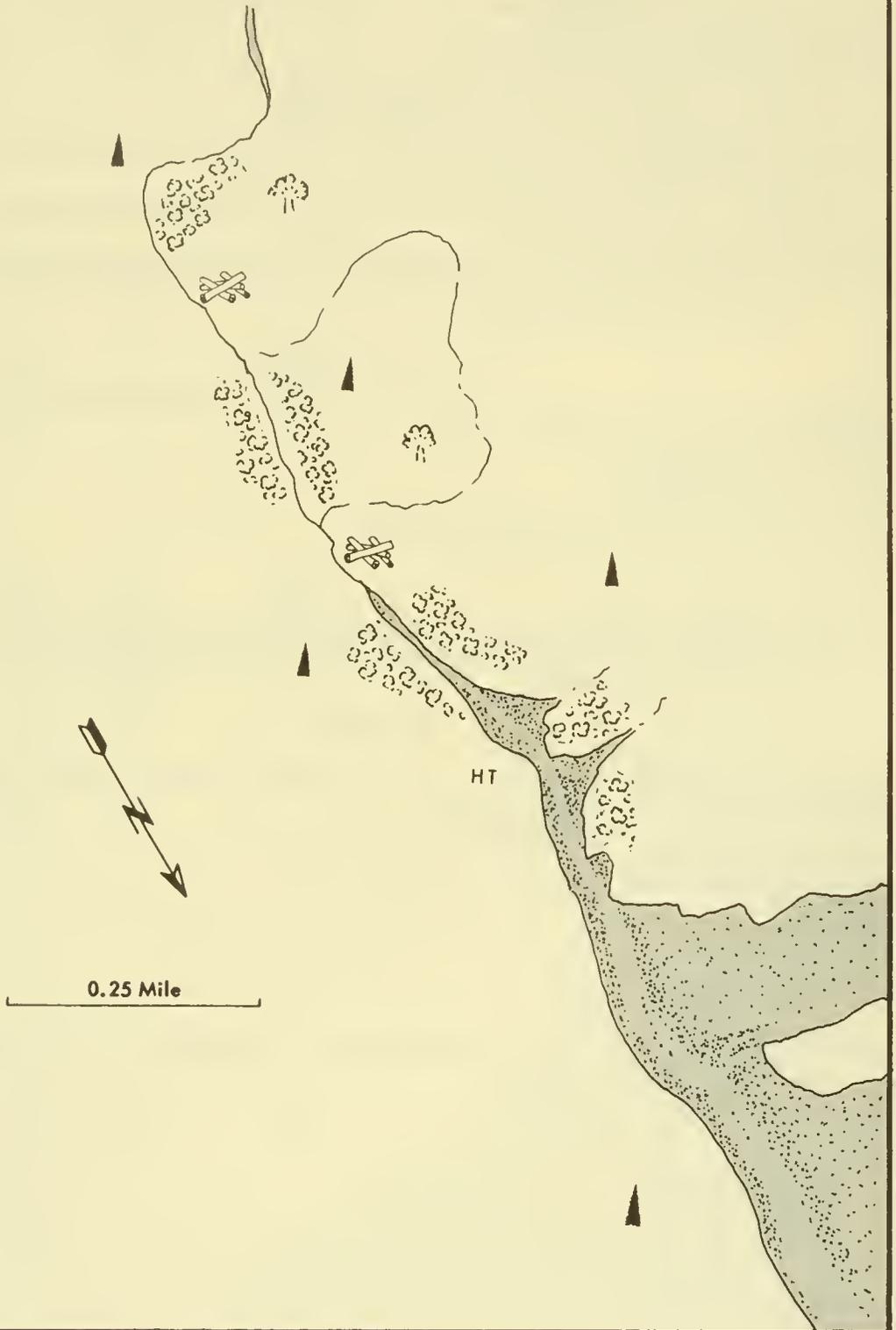
LENGTH ACCESSIBLE	1 mile.	AVERAGE WIDTH/DEPTH	8'8".
GRADIENT AND VELOCITIES		Moderate current.	
BOTTOM	Sand to coarse gravel.		
MARKER DISTANCE			
MARKER IDENTIFICATION			
BARRIERS			
TRIBUTARIES			
SCHOOLING AREAS			
SPAWNING AREAS	Good.		
GENERAL NOTES			

ESCAPEMENT RECORD

ADF STAT. No.
E 37B

(Counts made by ground surveys are designated by G; aerial surveys by A)

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 25 1949	1.0	FWS	10,000					
Sept 30 1955	1.0	FWS						Seeding excellent
Sept 17 1957	G 1.0	FWS	8,000					
Aug 17	A 0.5	FWS						No fish observed
Sept 11	A 0.2	FWS						No fish observed



EASTERN, FREDERICK SOUND, SAGINAW BAY, E, corner of head.

MAJOR SPECIES Pink, chum.

OTHER SPECIES Coho.

ESCAPEMENT TIMING Middle-late.

SPAWNING FACILITIES Poor.

STREAM TEMPERATURES

VALLEY DESCRIPTION Narrow valley with steep hillsides on E. side; more gentle on the W. side.

Valley is heavily timbered with a few scattered muskegs.

DRAINAGE 2.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION The stream enters the head of Saginaw Bay very close to the mouth of 38A running through an extensive mud tideflat.

ANCHORAGE Anchor about midway between the shores of the head of bay in 10 fathoms. Best to lay at old cannery float.

TRAILS AND SURVEY ROUTES Walking not difficult except where there are many windfalls.

AERIAL SURVEY NOTES Poor stream for aerial survey above the intertidal area due to very dark water and heavy overstory of brush.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH 25'/12".

GRADIENT AND VELOCITIES Sluggish.

BOTTOM Mud and silt.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Primarily off stream mouth.

SPAWNING AREAS Poor.

GENERAL NOTES The intertidal zone is long and flat covering about three-quarters of a mile of the stream. The upper area of this zone has a bottom of fine sand and silt. The stream is about 30 feet wide at the mouth.

UPSTREAM

LENGTH ACCESSIBLE 3 miles.

AVERAGE WIDTH/DEPTH 8'2"-4".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Silty gravel and brown algae.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS

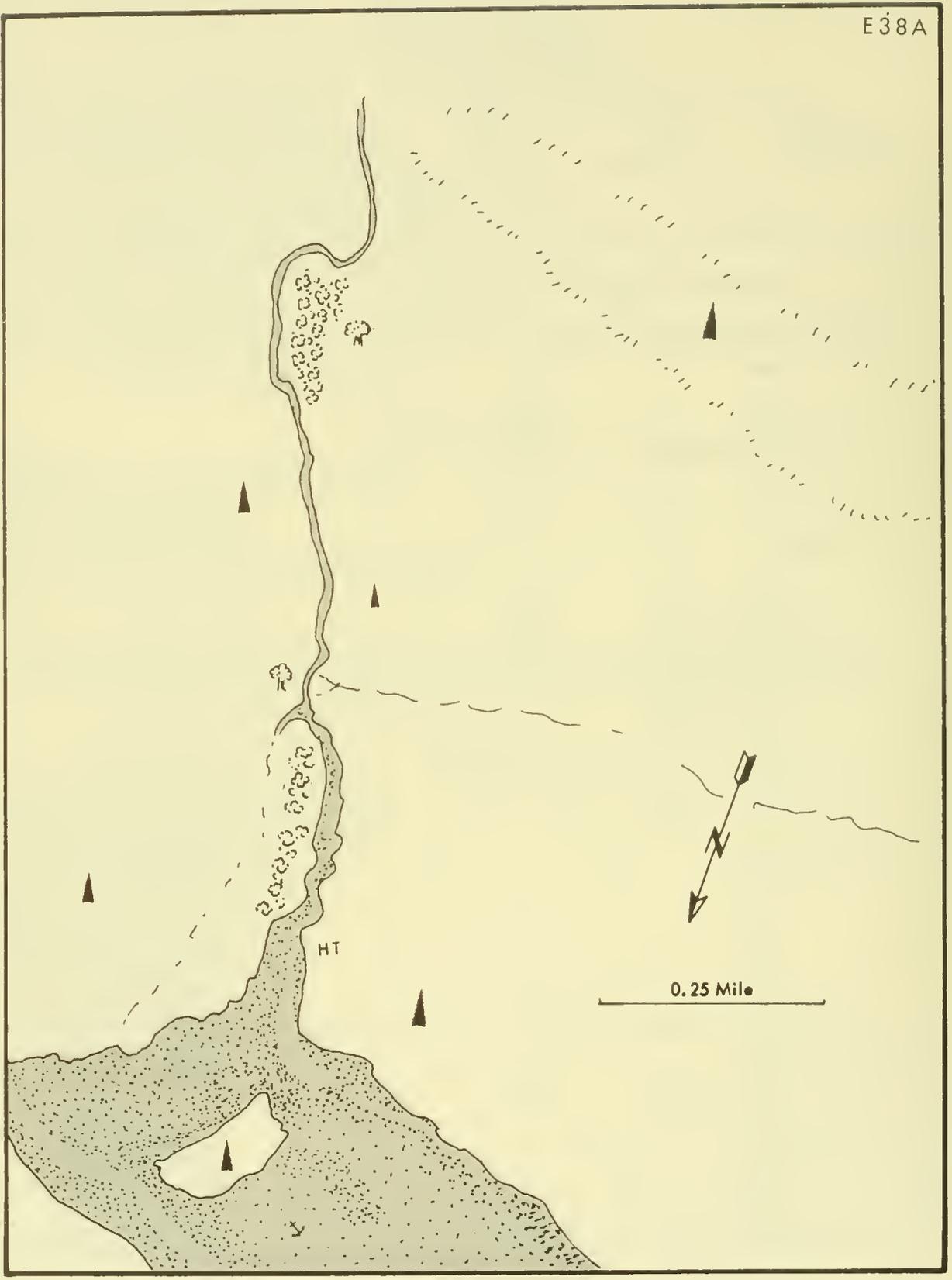
GENERAL NOTES The stream is timbered for about 1.5 miles then runs into open country ending in muskeg.

STRAIGHT CREEK

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Sept 24	1.5	FWS						Seeding good
1942								
Sept 26	1.0	FWS	20,000	8,000				
1943								
Sept 14	1.0	FWS	300					
1950								
Sept 18	0.7	FWS	110			23		
1953								
Aug 5	A 2.0	FWS				100		
Aug 17	A 1.5	FWS	500			500		
Sept 13	0.7	FWS	100			20		
1954								
Sept 18	G 0.5	FWS	650			3		
1955								
	No record							
1956								
Aug 29		FWS	25			12		
Sept 2	0.7	FWS	3,700			300		
Sept 4	1.5	FWS	2,600			700		
Sept 4	1.5	FWS	5,000					
Sept 5	1.5	FWS	2,600			700		20,000 pinks at mouth
Sept 6	1.5	FWS	5,000					
Sept 13		FWS	3,000					
1957								
July 28	G 1.0	FWS						No salmon observed
Aug 23	G 2.0	FWS						No salmon observed
Sept 11	A 0.2	FWS	50					
1958								
Aug 10	G 0.2	FWS						No salmon observed
Aug 26	A 0.5	FWS						No salmon observed
1959								
Aug 9	G	FWS						No salmon observed
1960								
Aug 25	A	ADF						No salmon observed; no jumps in bay
Aug 29	A mouth	ADF						No salmon observed
1961								
July 23	A 1.0	ADF						500 salmon in intertidal
Aug 9	A	ADF						2,000 in intertidal
Sept 8	G 2.5	ADF	2,500			600		
1962								
Aug 10	A 1.0	ADF						Few pinks in stream
Aug 29	A 0.5	ADF						200 in intertidal
Sept 28		ADF						No salmon observed
1963								
Aug 9	G 0.2	ADF						No salmon observed; jumps at mouth; a few chums in intertidal zone



56° 50.7' N. 134° 07.5' W.

EASTERN, FREDERICK SOUND, SAGINAW BAY, middle stream at W. corner of head.

MAJOR SPECIES Pink. OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle, Aug. -Sept.

SPAWNING FACILITIES Good spawning areas.

STREAM TEMPERATURES Normal range. Observed temperature: 52° F., 9/7/49.

VALLEY DESCRIPTION

DRAINAGE 7.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Anchor in midbay near head in 10 fathoms.

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH 20'8".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Gravel; much algae of various types.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 20'5".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Predominantly gravel; occasional sections of bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Suitable spawning areas throughout distance surveyed (0.75 mile).

GENERAL NOTES

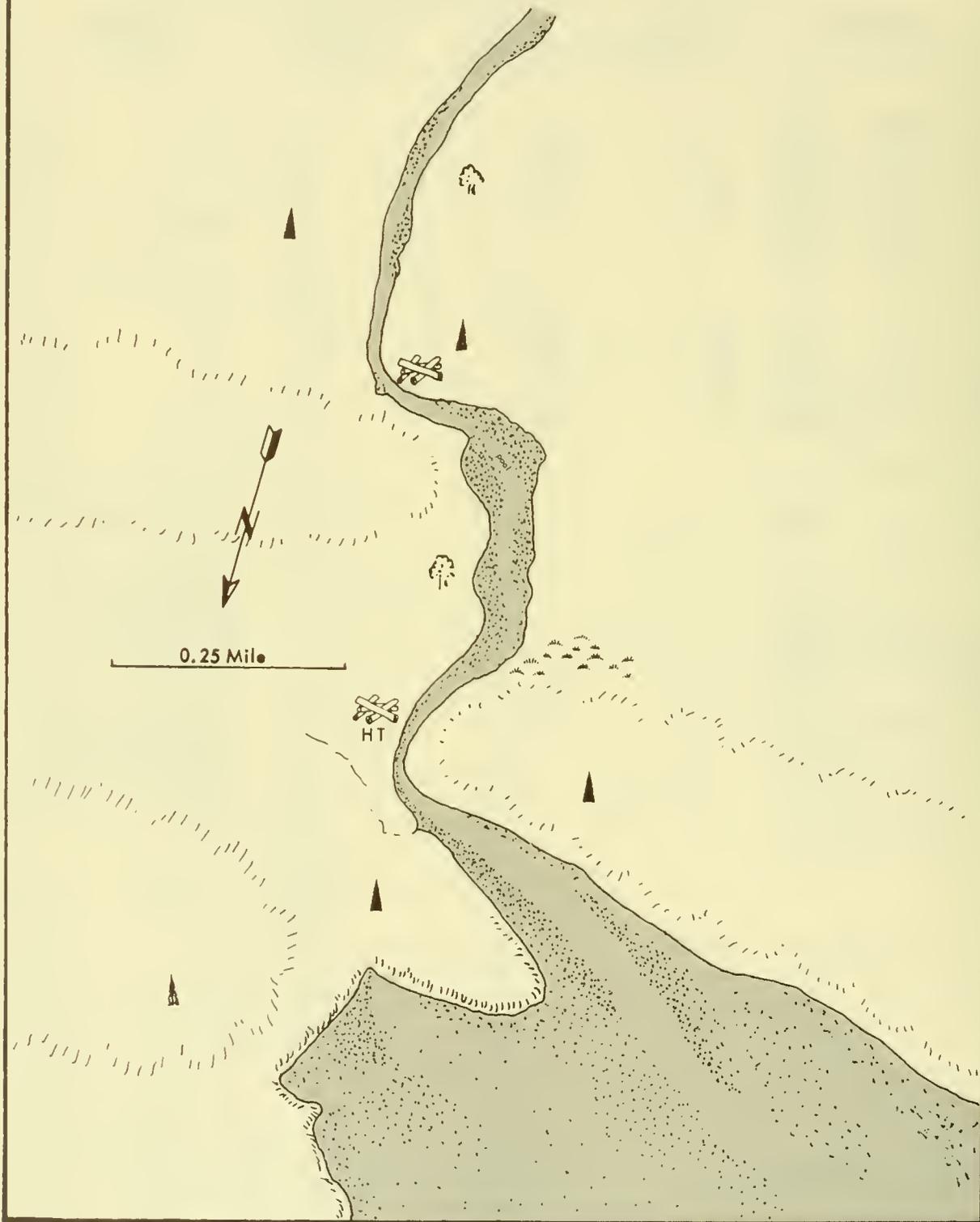
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 26	1.5	FWS	30,000					10,000 at mouth
1943								
Sept 14	1.0	FWS	20,000		5,000			110,000 at mouth
1947								
Oct 5	1.5	FWS	900		100			Seeding poor
1949								
Aug 23	G 0.7	FWS	35		300			
Sept 7	G 0.7	FWS	1,100	3	63	15		
1950								
Sept 18		FWS	110		23			
1951								
Sept 16	G 0.2	FWS	8,000		5,000			3,000 chums, 4,000 pinks in estuary
1952								<250 salmon in stream
Aug 26	A 1.5	FWS						
Sept 16	0.5	FWS	500		75			
1953								
Sept 13	G 0.2	FWS	900		10			
1954								
Sept 18	0.7	FWS	4,600				1 coho	
1955								
July 23	G 0.1	FWS			50			
Aug 1	G 0.1	FWS			70			2,000 chums at mouth
Aug 2	G 0.1	FWS						12 chums at mouth
Aug 9	G 1.0	FWS	50		500			100 chums at mouth
Aug 15	G 0.5	FWS	550		12			100 pinks, 2 chums at mouth
Aug 19	G 1.5	FWS	675		60			200 pinks, 7 chums at mouth
Aug 30	G 1.5	FWS	200		300		4 cohos	5,000 pinks at mouth
Sept 4	G 1.5	FWS	4,000		1,000			500 pinks, 50 chums at mouth
Sept 10	G 1.0	FWS	5,000					1,500 pinks at mouth
Sept 18	G 2.0	FWS	50,000		1,000			
Oct 4	G 0.7	FWS	5,500		50			
1956								
Aug 12	G	FWS	150		150			
Aug 19	G	FWS	300		300			Good showing at mouth
Aug 29	G	FWS	1,200		800			
Aug 30	G	FWS	2,400		1,600			
Sept 3	G 1.5	FWS	73,000		30			
Sept 13	G	FWS	29,000.		300			
1957								
July 21	G 0.7	FWS	50		75			
July 22	G 0.7	FWS	50		75			
July 25	G 0.5	FWS	50		75			
Aug 3	G 1.5	FWS	600		1,000			1,000 chums at mouth
Aug 13	G 1.2	FWS	600		1,500			
Aug 17	A 3.0	FWS	3,500					
Aug 18	G 1.5	FWS	300		700			
Sept 11	A 2.0	FWS	380					
Sept 13	G 0.7	FWS	83		104			

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1958								
July 27	G 0.5	FWS			16			
Aug 2	G 0.7	FWS			170			
Aug 9	G 1.0	FWS	30		800			
Aug 16	G 1.5	FWS	100		200			
Aug 23	G 0.7	FWS	200		50			
Aug 26	A 0.5	FWS						No fish observed
Sept 12	G 0.5	FWS	13		10			
Sept 18	G 1.5	FWS	8		4			
1959								
Aug 2	A 0.5	FWS	200		200			
Aug 9	G 0.2	FWS	300		300			
Aug 16	G	FWS	400		400			
Oct 10	G 0.5	FWS	59		39			
Season	G	FWS	17,000		3,000			
1960								
	No record							
1961								
Sept 21	A	ADF						Stream appears cleaned out
Sept 28	A 1.0	ADF						No fish observed
1962								
July 28	A 1.0	ADF						300-400 at mouth, 200 in intertidal zone
July 31	A 1.0	ADF						500 at mouth
Aug 29	A 0.5	ADF						200 in intertidal zone
Sept 28		ADF						No fish observed
1963								
Aug 9	G 0.7	ADF	few		1,500			500 chums in intertidal zone; jumps at mouth
Aug 29	A length	ADF						No fish fish observed in stream; 200 in intertidal zone



EASTERN, FREDERICK SOUND, SAGINAW BAY, SW. head.

MAJOR SPECIES Pink, chum.

OTHER SPECIES Coho.

ESCAPEMENT TIMING Middle and late.

SPAWNING FACILITIES Good. Excellent spawning riffles of medium-sized round gravel.

STREAM TEMPERATURES Normal range. Observed temperatures: 50° F., 9/7/49; 52° F., 9/8/51; 50° F., 9/21/51; 44° F., 9/30/51; 46° F., 9/11/52; 49.5° F., 9/25/52; 48.5° F., 9/28/52; 50° F., 9/8/53; 57° F., 9/20/53.

VALLEY DESCRIPTION The upper tidal zone pours through a bedrock gorge.

DRAINAGE 15.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters at head of Saginaw Bay in the SW. corner. Very limited flats area.

ANCHORAGE Anchorage off the stream is fair. Good moorage is available at the cannery float.

TRAILS AND SURVEY ROUTES Logging of drainage area planned.

AERIAL SURVEY NOTES Fair stream for aerial survey during periods of average to low water flow.

INTERTIDAL ZONE

LENGTH 0.2 mile.

AVERAGE WIDTH/DEPTH 30'/18".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Bedrock, gravel, sand, and algae.

LOW TIDE LOCATION

HIGH TIDE LOCATION Small rapids.

SCHOOLING AREAS A long, deep, wide pool is at the upper end, the remainder of the stream being more narrow and shallow with much algae.

SPAWNING AREAS Limited in the intertidal zone.

GENERAL NOTES A skiff can be floated out of the creek at low tide.

UPSTREAM

LENGTH ACCESSIBLE 6 miles.

AVERAGE WIDTH/DEPTH 25'/12".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Gravel; some bedrock.

MARKER DISTANCE 1.2 miles.

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES One good-sized branch from the S. is utilized by salmon.

SCHOOLING AREAS

SPAWNING AREAS Good spawning facilities.

GENERAL NOTES Low water at spawning time is occasionally a limiting factor.

SAGINAW CREEK

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Sept 24	1.5	FWS						Most fish dead. High water.
1942								
Sept 26	2.0	FWS	150,000		15,000		500 cohos	50,000 at mouth
1943								
Sept 14	3.0	FWS	50,000		5,000			20,000 at mouth
1947								
Oct 5	1.5	FWS	5,000		50			Seeding fair
1948								
Oct 1		FWS	10,000					Seeding good
1949								
Aug 23	G 0.2	FRI	3,500		12			10,000-20,000 pinks off mouth
Sept 7	G 1.0	FRI	12,700		24			
1950								
Aug 31	G 1.2	FRI	1,918	0	50	1		
Sept 18	G 1.2	FRI	1,228		144			
Sept 19	G 1.2	FRI	3,462	88	76	0		
1951								
Sept 8	A 1.2	FRI	5,300	25	239	5		All fresh fish
Sept 21	A 1.2	FRI	6,450	775	970	115		50% pinks spawning
Sept 30	A 1.2	FRI	1,100	350	480	390		Pink spawning. 50% chum
1952								
Sept 11	A 1.2	FRI	5,840	66	89	8		Majority fresh
Sept 16	0.5	FWS	1,500		150			
Sept 25	A 0.2	FRI						Flooding. Poor visibility
Sept 28	A 0.2	FRI	31	218	16	8		Pink run over. Chum fresh
1953								
Sept 8	A 1.2	FRI	3,920	14	195	11		Poor visibility
Sept 20	A 1.2	FRI	1,026	375	210	7		Pink spawning over
1954								
Sept 9	A	FRI	7,200	0	250			
Sept 10	G 0.5	FRI	7,100		230			A few dead pinks
Sept 18	G 0.2	FWS	4,500					10,000 pinks at mouth
Sept 17	G 0.5	FRI	18,450	950	250	115		15,000 mixed fish in estuary
1955								100 unspawned dead off mouth
July 25	G 0.2	FWS						200 chums off mouth
July 30	G 0.7	FWS			250			200 chums off mouth
Aug 30	A 2.0	FWS						No salmon observed
Aug 2	G 0.2	FWS			250			
Aug 8	G 1.5	FWS			750			
Aug 16	G 0.2	FWS	525					75 pinks at mouth
Aug 20	G 2.5	FWS	8,475		25			500 pinks at mouth
Aug 23	G 2.5	FWS	8,650		24			1,500 pinks at mouth
Aug 26	G 2.5	FRI	12,000					Salmon in bay
Sept 4	G 2.0	FWS	50,000		1,000			2,000 pink at mouth
Sept 5	G 2.0	FRI	54,000					Thousands above marker
Sept 10	G 0.5	FWS	15,000					10,000 pinks at mouth

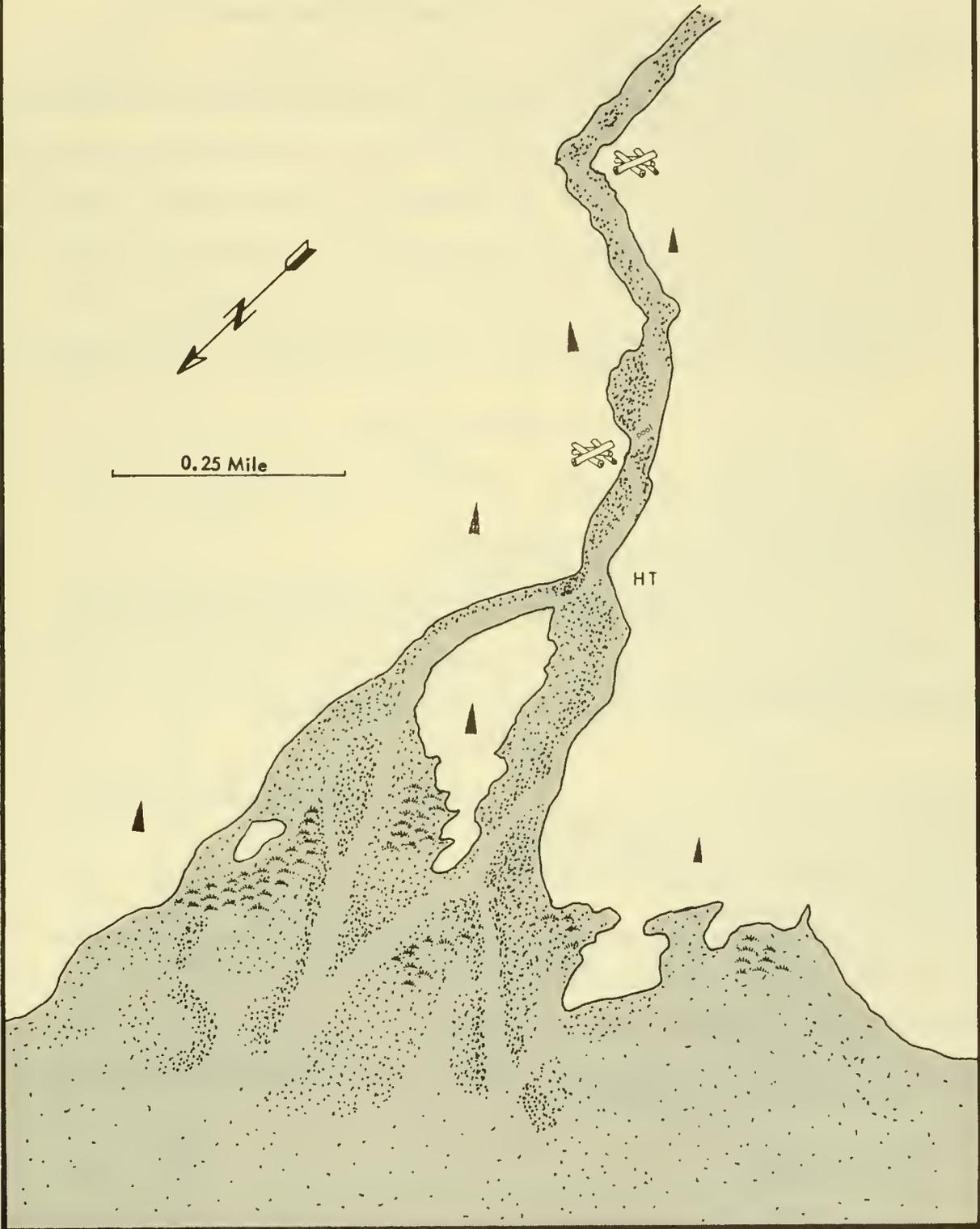
SAGINAW CREEK - Continued

ESCAPEMENT RECORD

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1955								
Sept 18	G 1.0	FWS	75,000		1,000			
Oct 4	G 0.6	FWS	11,000					
1956								
Aug 12	G 1.0	FWS	200		200			
Aug 14	G 1.0	FWS	3,600		400			Numerous schools at mouth
Aug 26	G 1.0	FWS	45,000					>10,000 pinks at mouth
Aug 29	G 1.0	FWS	11,000		1,000			
Sept 7	G 1.0	FWS	111,000					
Sept 12		FWS	125,000					
Sept 13	G 1.0	FRI	197,000		3,000			
1957								
July 27	G 0.7	FWS	1,800		100			
Aug 7	G 2.0	FWS	4,000					
Aug 10	G 1.0	FWS	600		50			
Aug 22	G 3.0	FWS	3,000		500			50 dead
Aug 27	A mrkr	FRI	2,000					300 at mouth
Sept 2	A mrkr	FRI	500					300 chums at mouth
Sept 4	A 0.5	FWS	1,000					
Sept 12	mrkr	FRI	300					3,000 chums off mouth
Sept 13	G 1.5	FWS	283		2,018			
Sept 22	G 0.7	FWS	133		2,202			
1958								
July 26	G 0.2	FWS			25			
Aug 3	G 1.0	FWS	30		200			
Aug 10	G 0.7	FWS	500		400			
Aug 16	G 1.5	FWS	1,000		100			
Aug 23	G 0.7	FWS	1,500					
Aug 26	A 1.0	FWS	300					
Sept 9		FWS	300					100 off mouth
Sept 12	G 0.5	FWS	225		1,050			
Sept 19	A	FWS			300			
Sept 21	G 1.5	FWS	70		420		40 cohos	
1959								
July 25	G 0.2	FWS	150		50			
July 27	A 1.0	FWS						No fish observed
July 31	G 0.2	FWS	2,000		500			
Aug 9	G 0.5	FWS	6,000		2,000			
Aug 14	G	FWS	8,000		2,000			
Oct 10	G 0.2	FWS					30 cohos	
Season	G	FWS	35,000		8,000		2,000 cohos	
1960								
Aug 29	A mouth	ADF						No fish observed
1961								
July 23	A 1.0	ADF	800					1,000 salmon at mouth
Aug 9	A	ADF	5,000					3,000 in intertidal zone
Aug 17	A 2.0	ADF	9,000					
Sept 8	G 2.5	ADF	20,000		500			1,000 salmon in intertidal zone

ESCAPEMENT RECORD

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1962								
July 17	A mouth	ADF						No salmon observed
July 28	A 2.0	ADF			200			400-500 at mouth, 300 in intertidal zone
July 31	A 1.0	ADF						700 mixed fish in stream, 500 at mouth
Aug 10	A 0.5	ADF						1,500 at mouth
Aug 13	A 1.5	ADF	6,000					
Aug 20	G 0.5	ADF	6,000					
Aug 29	A 3.0	ADF	7,000					
1963								
Aug 1	G 0.2	ADF	900		100			1,000 at mouth; 1,000 in intertidal zone; no fish beyond 0.2 mile
Aug 9	G 1.0	ADF	11,000		2,500			1,500 pinks and 1,000 chums in intertidal zone
Aug 29	A 0.2	ADF	2,000					7,000 new fish in inter- tidal zone
Sept 6	G 0.1	ADF						Stream flooding; im- possible to survey; a few fish at mouth



56° 49.6' N. 134° 17.0' W.

EASTERN, FREDERICK SOUND, SECURITY BAY, 2 miles from extreme head, E. shore.

MAJOR SPECIES Pink. OTHER SPECIES Chum.
 ESCAPEMENT TIMING Middle, Aug.
 SPAWNING FACILITIES Good.
 STREAM TEMPERATURES Cold-normal range. Observed temperatures: 54° F., 9/6/49; 48.5° F., 8/31/50; 49° F., 9/18/50; 51° F., 9/9/51; 49° F., 9/21/51; 46° F., 9/30/51; 47° F., 9/11/52; 49° F., 9/26/52; 51° F., 9/8/53; 47° F., 9/21/53.
 VALLEY DESCRIPTION Heavily timbered valley extending in an easterly direction into Saginaw Bay.
 DRAINAGE 11.04 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION Enters lagoon outlet on E. shore. There is no prominent marker of any type.
 ANCHORAGE Anchor large boat in 5 fathoms just abeam of Finger Pt. and proceed in a small boat along E. shore over long tideflats.
 TRAILS AND SURVEY ROUTES Unless a skiff is taken into the chuck on high or incoming tide a long walk is involved.
 AERIAL SURVEY NOTES Impossible to survey by air due to heavy overstory of brush, except for for the lower 0.25 mile and intertidal area. It is possible to fly through the valley into the head of Saginaw Bay.

INTERTIDAL ZONE

LENGTH 0.1 mile. AVERAGE WIDTH/DEPTH 65'/18".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel and sand.
 LOW TIDE LOCATION Confluence with lagoon outlet.
 HIGH TIDE LOCATION At beginning of timber.
 SCHOOLING AREAS Primarily off the mouth and one large pool at head of the intertidal area. Indications are that pinks occasionally move into the upper lagoon off #41 then back down and enter #40.
 SPAWNING AREAS Beyond a large, deep hole at the upper end, a long continuous riffle offers good spawning facilities.
 GENERAL NOTES Upper intertidal area is used extensively for spawning.

UPSTREAM

LENGTH 1.5 miles. AVERAGE WIDTH/DEPTH 55'/18".
 GRADIENT AND VELOCITIES Gentle to moderate.
 BOTTOM Gravel, sand, and bedrock; some silt.
 MARKER DISTANCE 0.37 mile to marker.
 MARKER IDENTIFICATION
 BARRIERS A few windfalls.
 TRIBUTARIES One mile upstream just above a 4' rock falls, the stream divides into 2 equal-sized branches, each about 30' wide. Each branch continues through low wooded valleys.
 SCHOOLING AREAS Small pools throughout the stream.
 SPAWNING AREAS Generally good spawning facilities.
 GENERAL NOTES A meandering stream with considerable deep areas and an area of splits and log tangles one-third mile above high tide.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 21	A 2.0	FWS	10,000					
1943								
Sept 13	A 2.0	FWS	25,000		5,000			
1945								
Sept 26	A 1.0	FWS	200,000		10,000		5,000 cohos	
1946								
Oct 1	A 1.0	FWS	50,000					
1947								
Oct 5	A 1.0	FWS	50					
1948								
Oct 2	A 1.0	FWS	300		50			
1949								
Aug 23	G 0.2	FRI	19		4			Seeding poor
Aug 31	G 1.0	FRI	50,000		500			Seeding good
Sept 6	G 0.2	FRI	2,250		6			
Sept 22	G 0.2	FRI	5,800	180	0			
Oct 1	G 1.0	FRI	15,000		500			
1950								
Aug 31	G 0.4	FRI	648	0	12	0		
Sept 18	G 0.4	FRI	3,370	203	38	0	100 cohos, 4 reds	
Sept 30	G 0.4	FWS	750		167			
1951								
Sept 9	G 0.5	FRI	1,210	17	53	0		Estimate probably low
Sept 21	G 0.5	FRI	2,400	275	190	45	30 cohos	70% pinks spawning
Sept 30	G 0.5	FRI	650	810	140	140	20 cohos	Pinks spawning, 60% chum
1952								
Aug 26	A 1.5	FWS						<250 fish in stream
Sept 11	G 0.7	FRI	3,450	6	0	1		Flooding. Poor visibility
Sept 16	G 0.5	FWS	8,000					
Sept 26	G 0.7	FRI	95	380	10	12	24 cohos	
1953								
Sept 8	G 0.5	FRI	3,300	0	30	0		Many jumps in bay
Sept 13	G 0.7	FWS	125					
Sept 21	G 0.5	FRI	520	101	0	0		Pink spawning over
Sept 27	G 1.5	FWS	17,500				300 cohos	
Oct 16	G 0.5	FWS			250			
1954								
Aug 24	G 0.5	FRI	1,100					2,000 off mouth
Sept 10	G 0.5	FRI	2,000					14,000 at mouth
Sept 18	G 1.0	FWS	7,500	1,000				1,000 fish in estuary
Sept 27	2.5	FWS	22,600				300 cohos	
1955								
July 30	A 1.0				50			
Aug 13	G 0.2	FWS						100 pinks, 5 chums at mouth
Aug 17	G 0.2	FWS						500 pinks, 20 chums at mouth
Aug 19	G 0.2	FWS	3					750 pinks, 25 chums at mouth
Aug 22	G 0.2	FWS	7					1,000 pinks, 25 chums at mouth

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1955								
Aug 24	G 0.2	FWS	8		17			1,500 pinks, 35 chums at mouth
Aug 24	G 0.2	FWS	1,900					5,000 pinks at mouth
Aug 26	G 0.2	FWS	13					1,500 pinks, 30 chums at mouth
Aug 26	G 0.2	FRI	4,000					2,000 schooled at mouth
Aug 29	G 0.5	FWS	17		2			2,000 pinks, 50 chums at mouth
Aug 31	G 0.5	FWS	1,000					2,500 pinks, 50 chums at mouth
Sept 3	G 0.5	FWS	10,000					Pinks present at mouth
Sept 5	G 0.2	FRI	45,000					30,000 at mouth. Thousands above marker
Sept 13	G 1.0	FWS	15,000					10,000 pinks at mouth
Oct 3	G 0.7	FWS		5,000			25 cohos	
1956								
Aug 26	G 1.0	FWS	5,000					5,000 pinks at mouth
Sept 1	G 1.5	FWS	4,176		3			
Sept 4	G 1.5	FWS	4,950		5			
Sept 7	G 2.5	FWS	12,500		210			2,250 mixed at mouth
Sept 7	G 0.5	FWS	20,000					Many jumps in bay
Sept 8	G 1.0	FWS	9,000		38			3,000 pinks at mouth
Sept 11	G 2.0	FWS	14,465		250			1,000 pinks at mouth
Sept 12	G 0.2	FWS	60,000					5,000 above marker
Sept 13	G 4.0	FWS	31,223		408			20,000-30,000 at mouth
Sept 16	G 2.0	FWS	31,000		400			2,000 pinks at mouth
Sept 25	G 1.0	FWS	9,000		5,000			
Oct 2	G 0.2	FWS	4,000		250		180 cohos	
1957								
Aug 17	A 1.0	FWS	1,500					
Aug 27	A	FRI						Few pinks. None off mouth
Sept 2	A	FRI	2					
Sept 12	A	FRI	300					Few chums. >5,000 head of bay
Sept 12	G 1.2	FWS	132		42		2 cohos	
Nov 11	G 0.5	FWS						No fish observed
1958								
Aug 10	G 1.0	FWS			30			
Aug 16	G 1.0	FWS			11			
Aug 21	G 1.0	FWS	15		8			
Aug 25	A	FWS						None observed
Aug 26	A 1.0	FWS	300					
Sept 9	G mkr	FWS	300					
Sept 9	A	FWS	300	0				Few chums. None off mouth
Sept 12	A length	FWS	1,000					3,000 off mouth W. stream
Sept 15	G 0.7	FWS	220		1			100 pinks, 10 chums, 5 cohos in tidal zone
Sept 19	A	FWS	500	0				None off mouth
Sept 23	G 1.0	FWS	75		10			

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1960								
Aug 29	A mouth	ADF						No fish observed
Sept 12	A 0.2	ADF	500					
Sept 16	G 0.2	ADF	500					
1961								
Aug 20	A	ADF						10,000 mixed fish in chuck
Aug 25	A	ADF						1,500 salmon at mouth
Sept 8	A	ADF	20,000					
Sept 11	G 2.5	ADF	5,000		50			8,000 salmon in intertidal
Sept 28	A	ADF						1,500 live salmon in intertidal zone
1962								
July 17	A mouth	ADF						No fish observed
Aug 10	A 1.0	ADF						No fish observed
Aug 29	A 1.5	ADF	1,000					200 salmon in intertidal zone
Sept 7	A 1.0	ADF						2,500 at mouth
Sept 10	G 2.0	ADF	4,500		100			3,800 pinks and 100 chums at mouth
Sept 20	0.2	ADF						300-400 at mouth
1963								
Aug 28	A 1.0	ADF						No fish observed in stream; 24,000 at mouth
Sept 1	G 0.2	ADF	few					Several thousand at mouth; stream too low for fish to enter

56° 46.2' N. 134° 17.2' W.

E 40A

EASTERN, FREDERICK SOUND, SECURITY BAY, extreme head of lagoon.

MAJOR SPECIES Chum.

OTHER SPECIES Pink, coho.

ESCAPEMENT TIMING Middle to very late.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES

VALLEY DESCRIPTION Narrow valley with steep sides. Heavily wooded with many muskegs scattered throughout.

DRAINAGE 7.8 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Stream flows across a wide grass flat and enters approximately in the middle of the extreme head.

ANCHORAGE Refer to stream #40.

TRAILS AND SURVEY ROUTES The stream is difficult to survey during high water because the many splits spread out the fish and dense wild currant bushes keep an observer away from the edge of the stream. A fairly good game trail follows the left bank above the stream but it is difficult to see the stream from it.

AERIAL SURVEY NOTES Fair for aerial survey. Enter valley on right side and fly to head of the valley. Salmon in large numbers move to the extreme head of this stream.

INTERTIDAL ZONE

LENGTH 0.2 mile.

AVERAGE WIDTH/DEPTH 30'/18".

GRADIENT AND VELOCITIES Slow.

BOTTOM Clean gravel on riffles. Clay exposed in deepest holes.

LOW TIDE LOCATION Confluence with lagoon.

HIGH TIDE LOCATION Beginning of timber at edge of grass flats.

SCHOOLING AREAS Primarily in the lagoon off the mouth and throughout the deep water areas of the intertidal area.

SPAWNING AREAS Good spawning throughout.

GENERAL NOTES A few pinks that use this system seem to prefer the fine intertidal gravel.

UPSTREAM

LENGTH ACCESSIBLE 2 miles.

AVERAGE WIDTH/DEPTH 35'/10".

GRADIENT AND VELOCITIES Moderate to slow.

BOTTOM Gravel. Considerable brown algae on gravel on many riffles.

MARKER DISTANCE No marker.

MARKER IDENTIFICATION

BARRIERS Log jams are a problem at low water levels only.

TRIBUTARIES None.

SCHOOLING AREAS Many pools throughout the length.

SPAWNING AREAS Good.

GENERAL NOTES When surveying by foot, stay along streambed as there are extensive beaver ponds along both sides of the stream back from the streambanks. The pinks enter as a middle run, but the major species, chum, enter late and continue along with coho into November. The stream has supported "fall fisheries" in the past. Extensively used for subsistence by Kake people.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

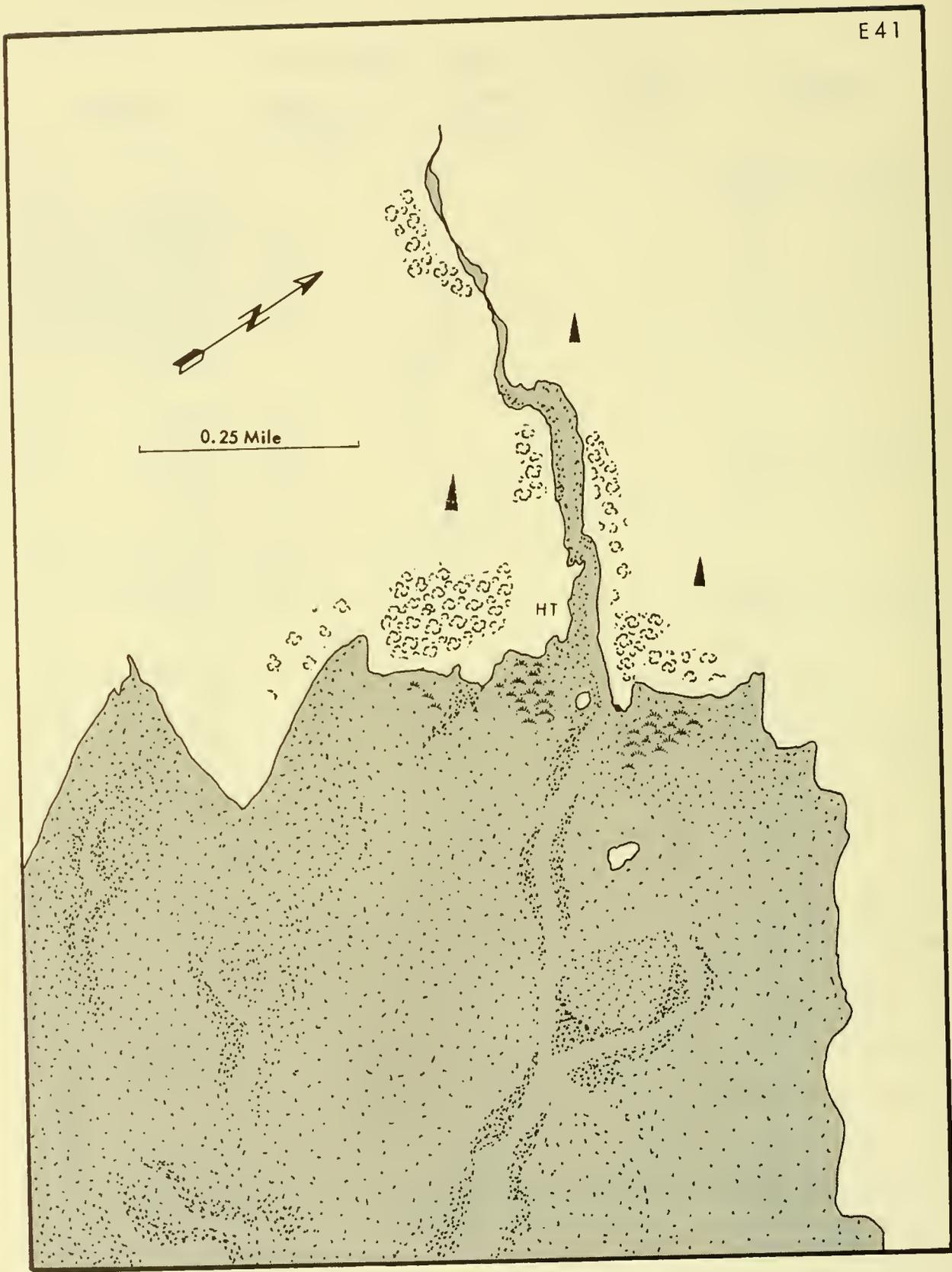
Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1945								
Sept 25	0.5	FRI						Several thousand fish
1946								
Oct 1		FWS						Some fish at mouth
1947								
Oct 5	0.5	FRI	200		100			Some fish at mouth
1948								
Oct 2	0.5	FRI	3,000		1,000		2 cohos	2,000 at mouth
1950								
Sept 19	0.5	FRI	103		20			
Sept 25	A	FRI						Many pinks; stream dis- colored
Sept 29	A	FRI						Good showing
1951								
Sept 17	G 0.7	FWS	8,000		6,000			Bay full of chums
1952								
Aug 26	A 2.0	FWS						< 500 fish in stream
Sept 16	0.5	FWS	8,000		1			
1954								
Sept 28		FWS	2,800					Countless chums
1955								
Aug 8	G 0.2	FWS			4			50 chums at mouth
Aug 11	G 0.2	FWS			9			50 chums at mouth
Aug 12	G 0.2	FWS			9			50 chums at mouth
Aug 15	G 0.2	FWS			14			250 pinks and 30 chums at mouth
Aug 19	G 0.2	FWS			17			500 pinks and 30 chums at mouth
Aug 22	G 0.2	FWS			22			1,000 pinks and 30 chums mouth
Aug 24	G 0.2	FWS			27			1,500 pinks and 30 chums at mouth
Aug 26	G 0.2	FWS			29			2,000 pinks and 35 chums at mouth
Aug 30	G 0.2	FWS			28			3,000 pinks and 35 chums at mouth
Aug 31	G 0.2	FWS	1,000		25			3,000 pinks and 50 chums at mouth
Sept 3	G 0.2	FWS	2,000		30			3,500 pinks and 50 chums at mouth
Sept 4	G 0.2	FWS	6,000		20			1,500 pinks and 50 chums at mouth
Sept 13	G 1.0	FWS	1,500		1,000			
Oct 3	G 0.7	FWS	600		1,000			
1956								
Sept 1	1.0	FWS	195		13			2,000 pinks at mouth
Sept 2		FWS	3					1,500 pinks at mouth
Sept 4	0.5	FWS	5					
Sept 11	0.7	FWS	465		42			2,000 pinks and 1,000 chums at mouth
Sept 14	1.0	FWS	629		64			1,000 pinks and 1,000 chums at mouth

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Sept 19	0.7	FWS						Many fish; water dark
Oct 12	0.5	FWS	1,500		4,500			5,000 chums at mouth
1957								
Aug 17	A 2.0	FWS	4,000					
Sept 12	G 0.2	FWS	79		117			
Sept 12	A 1.5	FWS	800		175			10,000 in upper lake
Sept 23	G 0.7	FWS	65		800			
Oct 10	G 1.0	FWS			8,000			5,000 dead
Oct 11	G 1.5	FWS			6,000			
1958								
Aug 20	G 1.0	FWS	7					
Aug 26	A 0.7	FWS	200					
Sept 12	A length	FWS	20		400			
Sept 15	G 0.7	FWS	25		350			6,000 chums in high tide zone
Sept 29	G 2.0	FWS	140		5,100		30 cohos	
1959								
Aug 8	A 1.0	FWS	50		50			
Sept 23	up lake	FWS			7,800			
Oct 9	G 0.5	FWS	70		5,100			Many dead pinks and chums; 500 salmon in salt water
1960								
Aug 25	A mouth	ADF						3,000 at mouth
Aug 26	A	ADF						800 at mouth
Aug 29	A	ADF						No fish observed
Sept 12	A 0.7	ADF			1,200			2,000 fish at mouth
Sept 17	G 0.2	ADF	100		100			3,000 off mouth in lake
Sept 22	A 0.5	ADF						300 chums in intertidal
Sept 26	A 0.7	ADF			2,000			
Oct 1	G 1.0	ADF			600			1,000 in lake; 500 in intertidal zone
?	G length	ADF			3,400			600 in lake
1961								
Aug 20	A	ADF			1,500			Plus 10,000 in chuck
Aug 25	A length	ADF						1,500 in intertidal zone
Sep 8	A	ADF						2,500 mixed fish at mouth
Sep 21	A 1.0	ADF			3,000			Mixed. Many dead
Sep 14	A 3.0	ADF	500		200			8,000-10,000 in lagoon
Sep 28	A 1.5	ADF						6,000 mixed fish in stream; 1,200 at mouth
Oct 1	G 1.5	ADF						5,000 mixed; 3,000 at mouth
Oct 5	A 0.5	ADF						1,500 chums in intertidal
1962								
July 31	A	ADF						No salmon observed
Sep 7	A 1.0	ADF	400					2,000 salmon in lagoon.
Sep 18	A length	ADF			18,000			8,000 mixed
Sep 20	G	ADF						3,500-5,000 mixed in intertidal zone
Sep ?	A	ADF	3,500		500			4,000-5,000 at mouth; 7,000 in intertidal zone
Oct 11	A length	ADF			8,000			Many dead; 250 in intertidal zone

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1963								
Aug 28	A 0.5	ADF	some					2,000 in lagoon; 2,000 in intertidal zone
Sept 1	G IT	ADF	few		few			Good showing at mouth; 1,000 in intertidal zone; stream almost dry
Oct 2	G 0.5	ADF	200		1,100			600 chums at mouth; 700 intertidal carcasses evidence of many more fish; peak past



EASTERN, FREDERICK SOUND, SECURITY BAY, 1.5 miles W. of lagoon, S. shore.

MAJOR SPECIES Pink. OTHER SPECIES Chum.
 ESCAPEMENT TIMING Middle.
 SPAWNING FACILITIES
 STREAM TEMPERATURES
 VALLEY DESCRIPTION
 DRAINAGE 2.8 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES Difficult above intertidal zone.

INTERTIDAL ZONE

LENGTH 0.2 mile. AVERAGE WIDTH/DEPTH 20'6".
 GRADIENT AND VELOCITIES Moderate.
 BOTTOM Clean gravel on riffles; clay in deepest holes.
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS Off mouth.

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 15'3".
 GRADIENT AND VELOCITIES Moderate.
 BOTTOM Gravel; considerable algae on gravel on many riffles.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS
 TRIBUTARIES
 SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES Stream usually very low until fall rains. Fish lay off mouth.

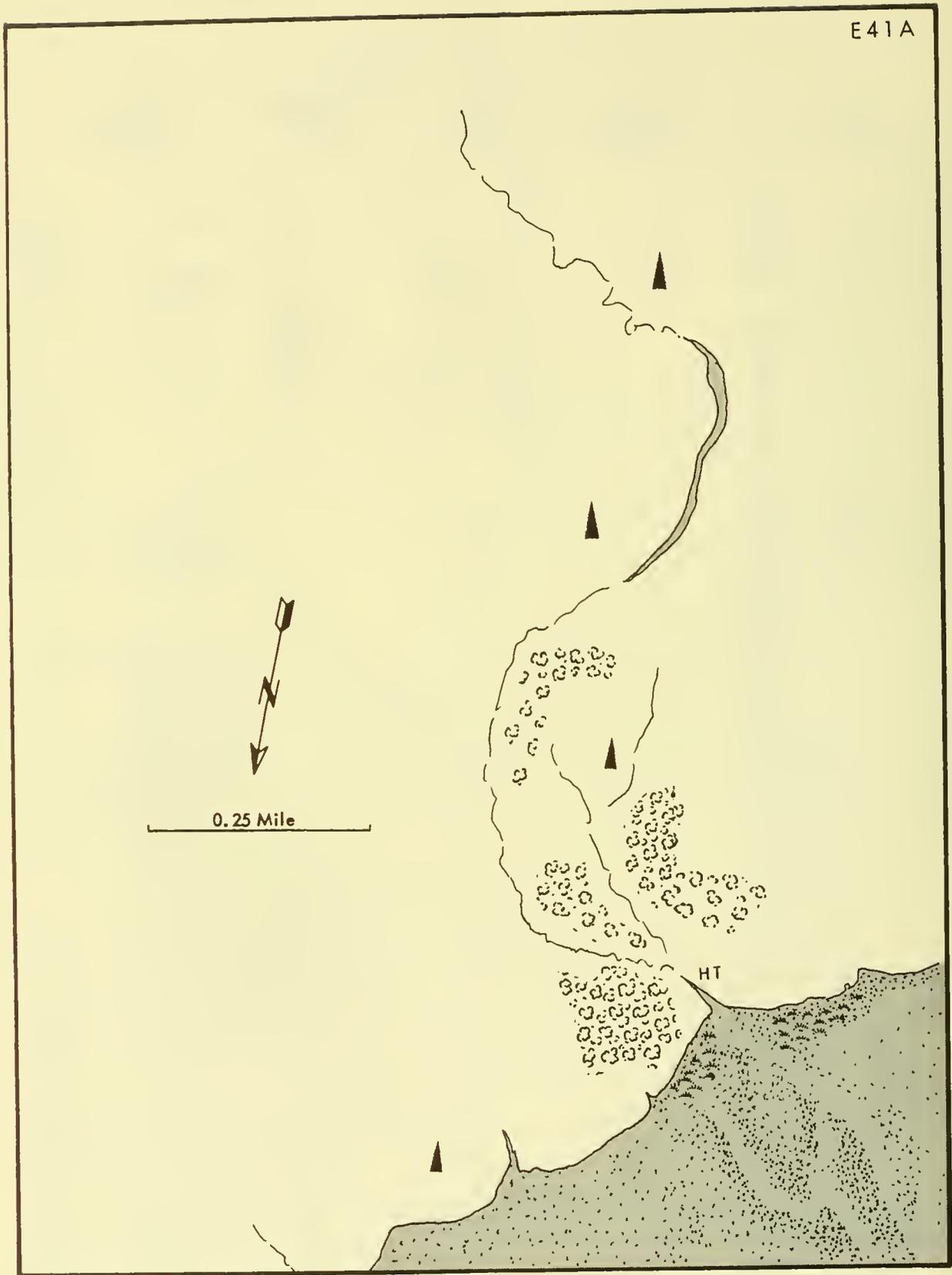
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Sept 25	A 1.2	FWS	1,500		100			
1948								
Sept 28	A	FWS	1,000		1,000			
1949								
Sept 6	G 0.2	FRI	300		62			
Sept 22	G 0.2	FRI	2,400		265			
Oct 1	G 0.2	FRI	2,000		500			
1953								
Sept 13	G 0.5	FWS	290		75			
1954								
Sept 28	G	FWS	4,500					
1955								
Aug 8	G 0.2	FWS			2			10 chums at mouth
Aug 11	G 0.2	FWS			2			10 chums at mouth
Aug 12	G 0.2	FWS			4			50 pinks, 15 chums at mouth
Aug 15	G 0.2	FWS			6			50 pinks, 13 chums at mouth
Aug 19	G 0.2	FWS			6			500 pinks, 20 chums at mouth
Aug 22	G 0.2	FWS			7			1,500 pinks, 25 chums at mouth
Aug 24	G 0.2	FWS			4			2,500 pinks, 30 chums at mouth
Aug 24	G 0.2	FWS						3,000 pinks, 4 chums at mouth
Aug 26	G 0.2	FWS			6			3,000 pinks, 30 chums at mouth
Aug 30	G 0.2	FWS			9			>8,500 pinks, >30 chums at mouth
Aug 31	G 0.2	FWS	370		7			>3,500 pinks, >30 chums at mouth
Sept 3	G 0.2	FWS	500		7			>3,500 pinks, >30 chums at mouth
Sept 4	G 0.2	FWS	3,000		13			>1,500 pinks, >20 chums at mouth
Sept 11	G 0.5	FWS	3,000					None observed at mouth
Oct 3	G 0.2	FWS	2,000		25			None at mouth
1956								
Aug 27	G 0.2	FRI						800 pinks at mouth
Aug 31	G 0.2	FRI	36		54			2,000-3,000 pinks, 2 chums at mouth
Sept 2	G 0.2	FRI	44		66			200 pinks at mouth
Sept 4	G 0.2	FRI						44 pinks at mouth
Sept 6	G 0.2	FRI	245		30			1,500 pinks, 300 chums at mouth
Sept 8	G 0.2	FRI	60		8			1,000 pinks at mouth
Sept 10	G 0.2	FRI	240		67			1,000 pinks at mouth
Sept 12	G 0.2	FRI	828		104			2,500 pinks, 100 chums at mouth
Sept 23	G 0.5	FRI	5,700		3,000			
Sept 25	G 1.0	FRI	2,000		1,500			

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Oct 1	G 0.2	FRI	2,060		2,120			
1957								
Sept 12	G 0.5	FWS	4		4			
Sept 23	G 0.5	FWS	15		650			
Oct 12	G 0.2	FWS						No fish observed
1958								
July 31	G 0.05	FWS			15			
Aug 1	G 0.05	FWS			20			
Aug 3	G 0.1	FWS			16			
Aug 6	G 0.1	FWS			37			
Aug 9	G 0.2	FWS			25			
Aug 14	G 0.5	FWS			137			
Aug 18	G 0.5	FWS			5			
Aug 22	G 0.2	FWS			13			
1959								
Aug 7	G 1.0	FWS			26			
Aug 8	A 0.5	FWS						No fish observed
1960								
Aug 29	A mouth	ADF						No fish observed
Sept 16	G 0.2	ADF	50					
1961								
Aug 20	A	ADF						500 at mouth; 1,500 in intertidal zone
Aug 25	A	ADF						500 at mouth
1962								
July 31	A mouth	ADF						No fish observed
Aug 10	A mouth	ADF						600 at mouth
Aug 13	A mouth	ADF						500-600 at mouth
1963								
Aug 28	A mouth	ADF						1,000 at mouth



EASTERN, FREDERICK SOUND, SECURITY BAY, middle of W. shore.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle-late, Aug.

SPAWNING FACILITIES

STREAM TEMPERATURES No observed temperatures.

VALLEY DESCRIPTION Very tortuous course and overgrown with bushes.

DRAINAGE 4 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Refer to #40.

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES The stream cannot be surveyed by air above the intertidal area due to its small size and heavy overstory.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH 15'3".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Mossy gravel and silt.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Primarily off stream mouth.

SPAWNING AREAS

GENERAL NOTES Stream is very narrow except for 150 yards of intertidal zone. It is very seldom wider than 8' and deeper than 2"-8".

UPSTREAM

LENGTH ACCESSIBLE

AVERAGE WIDTH/DEPTH 5'4".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Clean gravel and coarse sand.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES Stream has 2 small branches which meander through fairly dense small brush.

SCHOOLING AREAS

SPAWNING AREAS Good.

GENERAL NOTES The upper stream has good gravel but could not support many salmon.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Sept 25	0.5	FRI	14,000		2,600			
1948								
Sept 29		FRI	1,500					
1949								
Oct 1		FRI	5,000		2,600			
1953								
Sept 13	G 0.2	FWS	100		40			
1955								
Aug 24	G 0.2	FWS	2,700					27 chums at mouth
Sept 11	G 0.5	FWS	3,000					
1956								
Aug 6	0.5	FWS			68			
Aug 10	0.5	FWS	6		100			50 chums at mouth
Aug 12	A	FWS	0		100			
Aug 14								50-70 chums at mouth
Aug 20	0.5	FWS	0		25			
Aug 27	0.2	FWS			12			300-500 pinks and 50 chums at mouth
Aug 31	0.2	FWS	6		80			5,000-6,000 pinks and 10 chums at mouth
Sept 2	0.2	FWS	19		38			75 pinks and 8 chums at mouth
Sept 4		FWS						94 pinks and 46 chums at mouth
Sept 6	0.5	FWS	64		46			4,000-5,000 pinks and 1,000 chums at mouth
Sept 8	0.5	FWS	400		140			3,000 pinks at mouth
Sept 10	0.5	FWS	1,620		213			1,000 pinks and 100 chums at mouth
Sept 12	0.5	FWS	3,440		453			3,000 pinks at mouth
Sept 15	0.5	FWS	3,031		401			2,000 pinks at mouth
Sept 23	0.2	FWS	5,700		300			
Oct 1		FWS	4,866		234			
1957								
Aug 17	A 2.0	FWS						25 fish
Sept 12	G 0.2	FWS	35		39			
Sept 12	A 0.2	FWS			600			
Oct 12	G 0.2	FWS					25 cohos	
1958								
Aug 6	G 0.05	FWS			5			
Aug 13	G 0.2	FWS			7			
Aug 15	G 0.2	FWS			119			
Aug 19	G 0.2	FWS			13			
Aug 22	G 0.2	FWS			33			
Sept 15	G 0.2	FWS						20 pinks in intertidal zone

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1959								
July 31	G 1.0	FWS			15			
Aug 7	G 1.0	FWS	10		55			
Aug 8	A 0.5	FWS	100					
Aug 12	G 1.0	FWS			50			
Sept 23	G 0.1	FWS	40					
1960								
No record								
1961								
Aug 20	A	ADF						2,500 at mouth
Aug 25	A	ADF						1,500 in intertidal zone
1962								
July 31	A mouth	ADF						No fish observed
Aug 10	A mouth	ADF						Fish present at mouth
Aug 13	A mouth	ADF						Few at mouth
1963								
Aug 28	A mouth	ADF						400 at mouth

56° 48. 2' N. 134° 20. 4' W.

EASTERN, FREDERICK SOUND, SECURITY BAY, 1 mile from mouth of bay on S. shore.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle-late, Aug.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE 4 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES At high water it is difficult to survey because of the many windfalls and dense brush.

AERIAL SURVEY NOTES Poor stream to survey due to small size and overstory of brush.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES

BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Primarily off stream mouth.

SPAWNING AREAS

GENERAL NOTES This stream enters the bay through a fairly extensive tideflat and is the largest of the three streams on the W. shore.

UPSTREAM

LENGTH ACCESSIBLE 0.5 mile.

AVERAGE WIDTH/DEPTH 20'/6".

GRADIENT AND VELOCITIES Moderate current.

BOTTOM Coarse gravel and small rocks.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

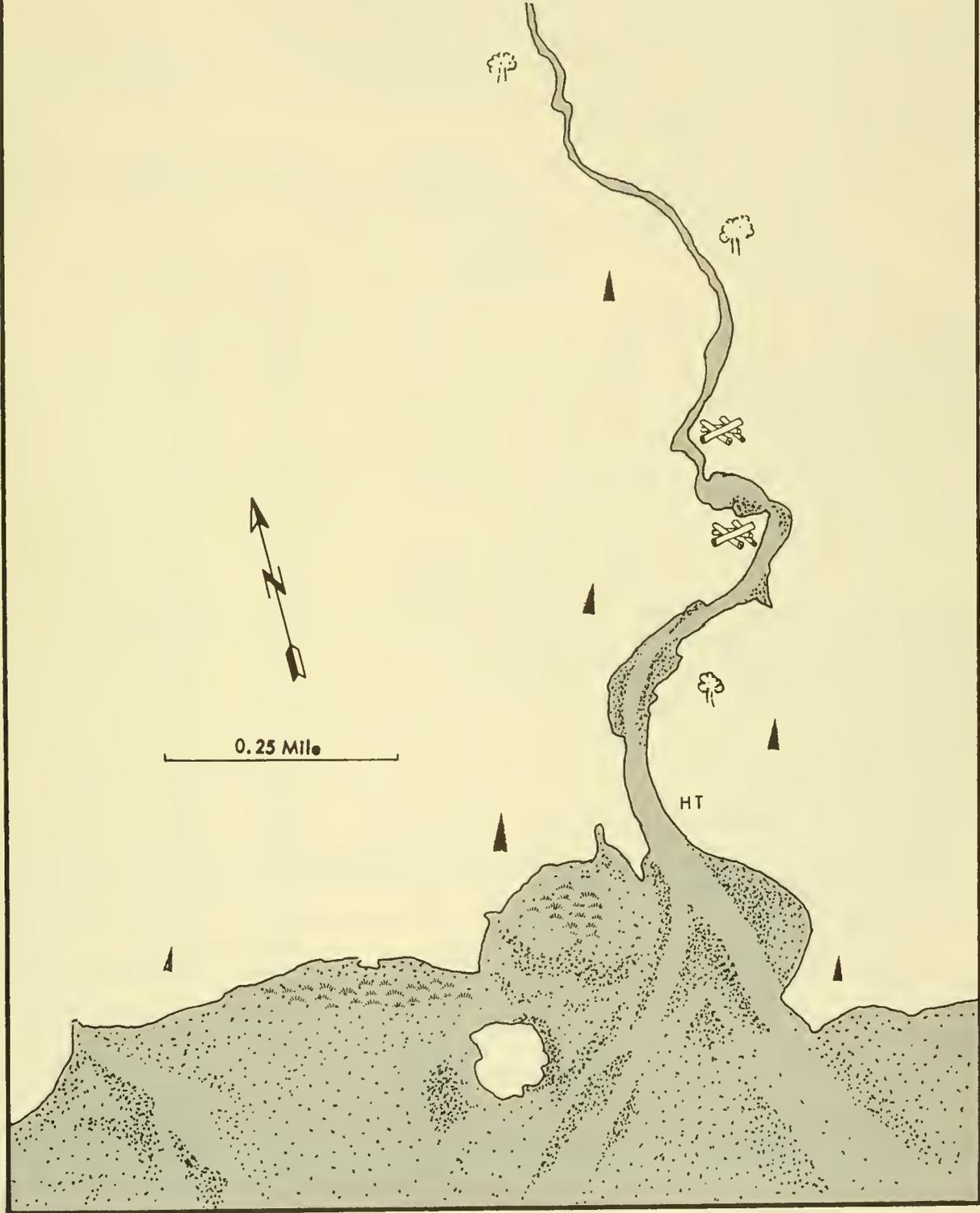
SPAWNING AREAS Good.

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1941								
Sept 25	0.5	FRI	31,700					
1943								
Sept 13	0.7	FWS	5,000		20,000			
1948								
Sept 29		FWS	1,000					



56°41.6' N. 134°13.8' W.

ADF STAT. No.
E 42

EASTERN, CHATHAM STRAIT, ROWAN BAY, SE. shore opposite entrance to bay.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho.

ESCAPEMENT TIMING

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. Observed temperature: 47.5° F., 9/1/50; 53° F., 9/20/51.

VALLEY DESCRIPTION

DRAINAGE 18.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES Easy stream to inspect if water is at normal height but would be very difficult at flood stage.

AERIAL SURVEY NOTES Difficult to survey due to brushy overstory.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES

BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 2 miles.

AVERAGE WIDTH/DEPTH 50'/12".

GRADIENT AND VELOCITIES Moderate to swift.

BOTTOM 60% exposed bedrock; 40% excellent gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Fair.

GENERAL NOTES Rowan Bay is good coho area although late surveys are lacking; all streams in bay receive coho escapement.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 27	2.0	FWS	150,000				30,000 cohos	
1943								
Sept 11	1.5	FWS	20,000		1,000			
Oct 16	1.0	FWS			500			
1949								
Sept 5	G 0.5	FRI	12,350	0	4	0		Many jumps off mouth
Sept 19	G 1.0	FRI	11,300	157	10	4		Weather made survey estimate difficult
1950								
Sept 1	0.5	FRI	258	0	3	0		
Sept 12	G 0.5	FRI	370	1	0	1		
Sept 18	G	FRI	427	1	71	0	10 cohos	Chums jumping in outer bay
Sept 19	G	FRI	7					
1951								
Sept 10	G 0.5	FRI	3,270	0	31	3		
Sept 20	G 0.5	FRI	4,750	50	100	5	55 cohos	
Oct 1	G 0.5	FRI	490	240	11	32		
1952								
Sept 12	G 0.6	FRI	530					
Sept 26	G 0.6	FRI	92	3	32	0	16 cohos	
1953								
Aug 5	A 4.0	FWS	400					
Aug 17	A 3.0	FWS	500		500			
Sept 9	G 0.6	FRI	280	0	60	0		
Sept 14	G 1.5	FWS	27		11			
Sept 22	G 0.6	FRI	280	40	50	4	820 cohos	
1954								
Aug 24	marker	FRI	1,000					
Sept 9	marker	FRI	3,000					1,000 at mouth
Sept 17	marker	FRI	3,000					Chum in outer bay
Sept 17	G 1.0	FWS	2,200		575		5 cohos	
1955								
Aug 6	G 6.0	FWS						500 pinks at mouth
Aug 26	G 2.0	FWS	1,450					5,000 pinks at mouth
Aug 26	G 5.0	FWS	1,300					5,000 pinks at mouth
Aug 26	A	FRI	>14,000					Jumps in bay
Sept 3	G 5.0	FWS	10,000		2,000			Pinks present at mouth
Sept 5	A	FRI	40,000					Jumps in bay. Some present at mouth
Sept 15	G 1.0	FWS	3,000					
Sept 29	G 2.5	FWS			2,000			
1956								
Aug 11	G 1.0	FWS	2,530		0			25 pinks at mouth
Aug 16	G 1.0	FWS	30					25 pinks at mouth
Aug 20	G 1.0	FWS	30					25 pinks at mouth
Aug 26	G 1.0	FWS	30					25 pinks at mouth
Aug 26	G 1.0	FRI	7,000					
Aug 28	G 1.0	FWS	300					1,000 pinks at mouth
Sept 1	G 1.0	FWS						A few pinks at mouth
Sept 4	G 1.0	FWS	2,500					1,000 pinks at mouth
Sept 7	G 1.0	FRI	7,000					10,000-20,000 pinks at mouth

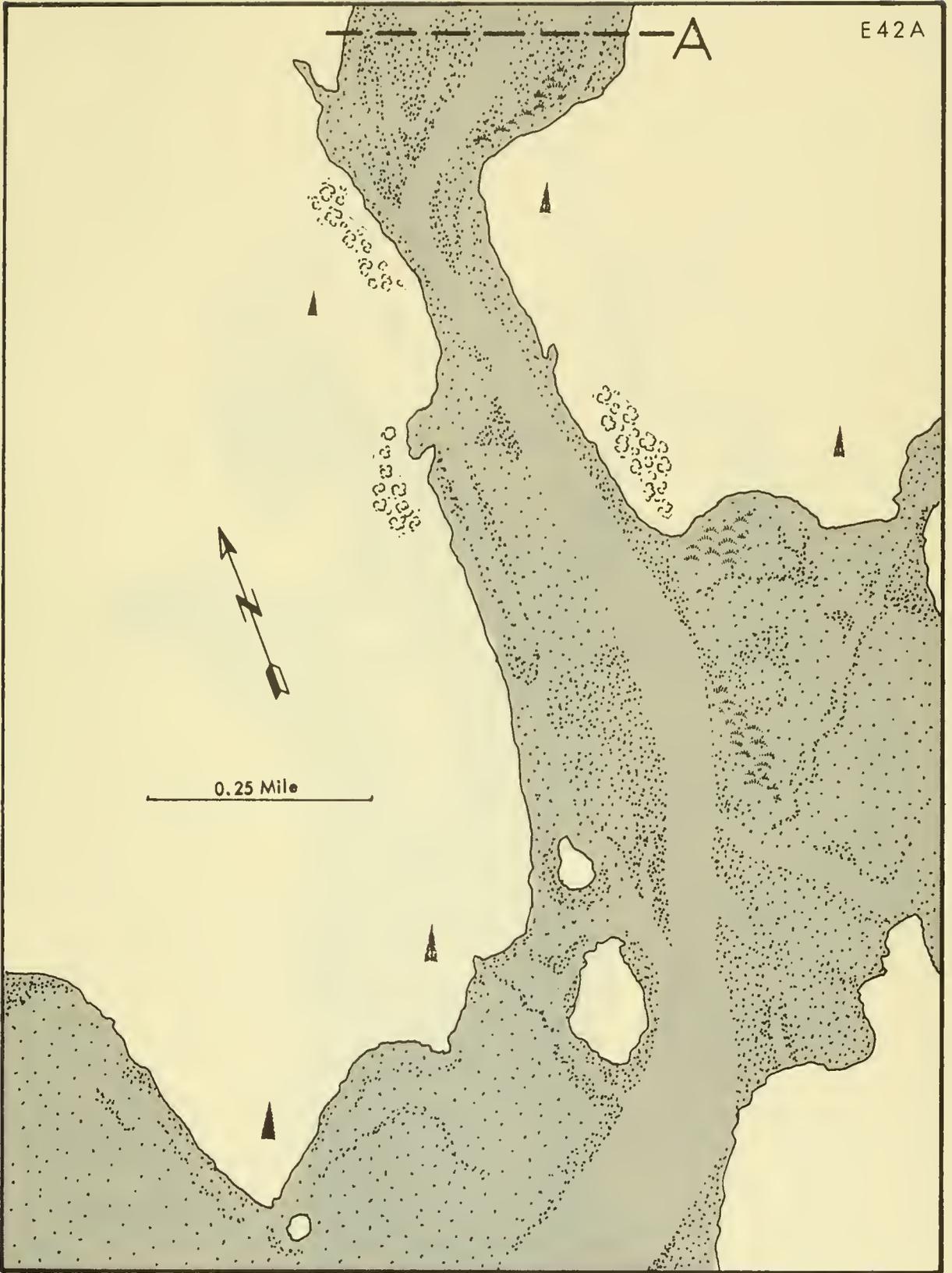
ESCAPEMENT RECORD - Continued

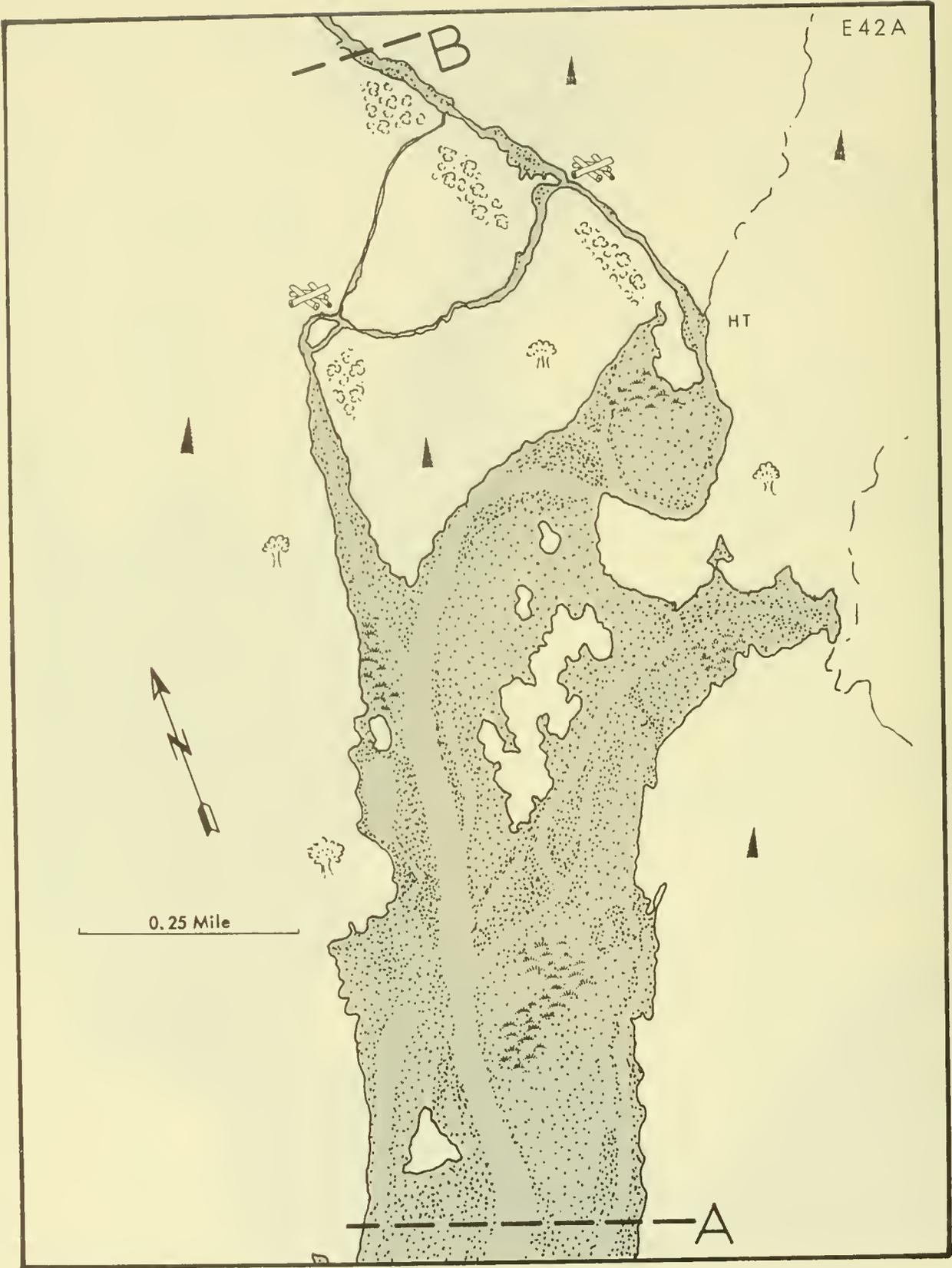
Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Sept 10	G 1.5	FWS	1,600					2,000 pinks at mouth
Sept 12	G 1.5	FWS	6,000					3,000 pinks at mouth
Sept 16	G 2.0	FWS	5,200		325			
1957								
Aug 14	G 1.2	FWS	50		500			
Aug 17	A 2.0	FWS	3,500					
Aug 27	A mrkr	FRI	300					
Sept 2	A mrkr	FRI	500					
Sept 11	G 0.2	FWS	8		245			
Sept 12	A mrkr	FRI			300			
Sept 13	A length	FWS						Thousands in bay
1958								
Aug 26	A 1.5	FWS						No fish observed
Sept 12	A length	FWS						Pinks and chums present
Sept 14	G 0.2	FWS	100					200 pinks, 50 chums, 30 cohos in tidal zone. All fresh
1959								
Aug 11	A 1.0	FWS						No fish observed
Oct 6	G 0.5	FWS						No fish observed
1960								
Aug 26	A mouth	ADF						500 at mouth
Sept 22	A 0.5	ADF						No fish observed
Oct 17	A mouth	ADF						No fish observed
1961								
Aug 1	A mouth	ADF						Many fish present in first pool above mouth
Aug 25	A 0.5	ADF						Few fish at mouth; pinks present
1962								
July 28	A	ADF						No fish observed
Aug 10	A	ADF						5,000 at mouth
Aug 29	A 1.0	ADF						1,500 in intertidal zone; 12,000 mixed fish in stream
1963								
Aug 10	G 1.5	ADF	10,000		few			700 mixed in intertidal zone
Aug 19	A 0.2	ADF						Poor visibility
Aug 28	A 0.5	ADF						Many dead; 1,000 fish in intertidal zone
Sept 2	skiff	ADF						Coho jumping in bay;; 1,500 fish in intertidal zone

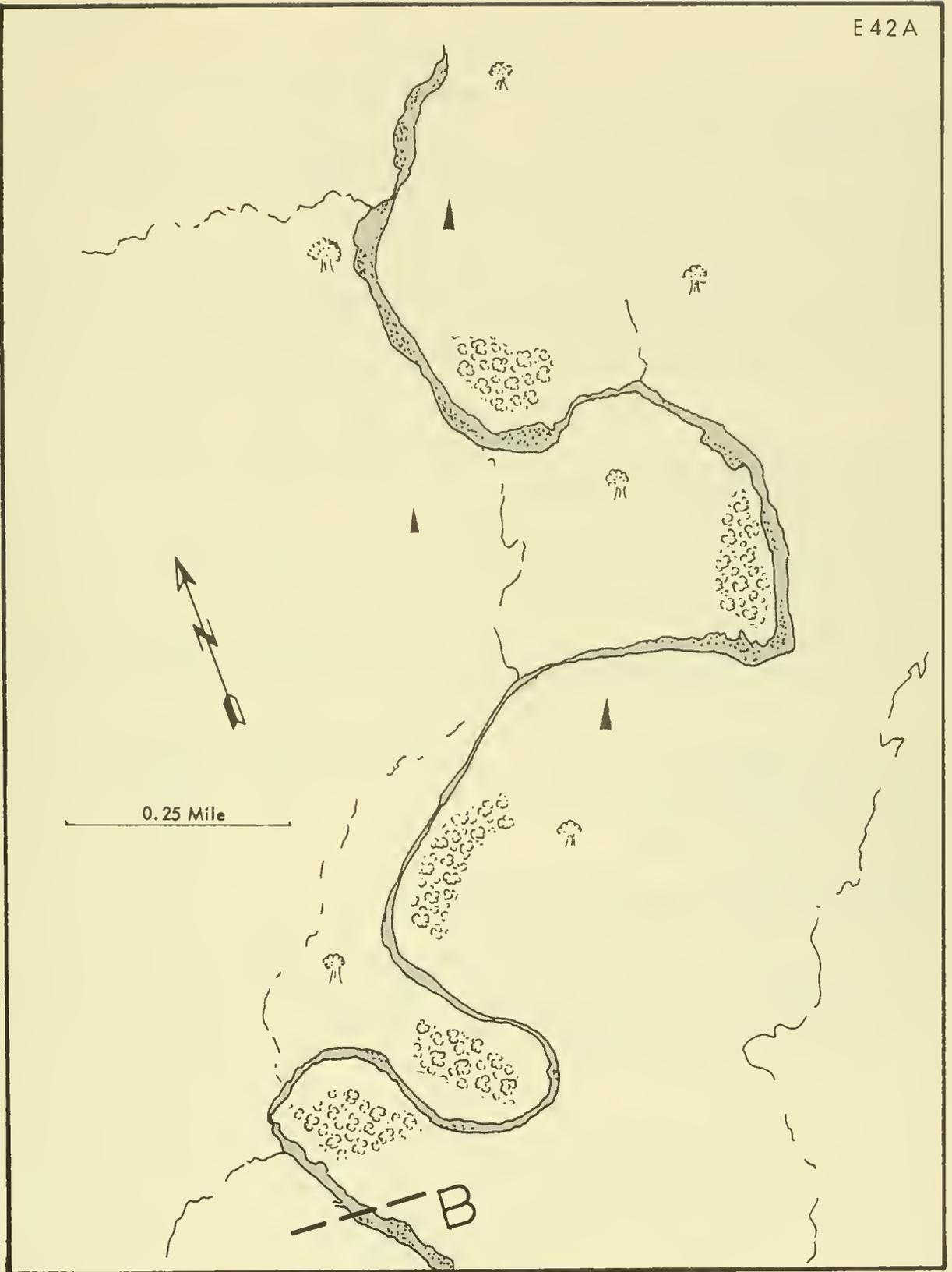
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56° 40.6' N. 134° 12.7' W.

EASTERN, CHATHAM STRAIT, ROWAN BAY, head of N. arm.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho.
 ESCAPEMENT TIMING Middle, Aug.
 SPAWNING FACILITIES
 STREAM TEMPERATURES Cold range. Observed temperatures: 48° F., 9/5/49; 47.5° F., 9/1/50;
 48° F., 9/10/51; 49° F., 9/20/51; 46° F., 10/1/51; 48° F., 9/12/52; 49° F., 9/26/52.
 VALLEY DESCRIPTION Wide, steep-sided, heavily wooded valley.
 DRAINAGE 17.8 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION Stream flows into the extreme head of bay.
 ANCHORAGE Leave skiff at low tide. Anchorage is off mouth of the stream. Enter the bay with caution
 as there are many rocks and reefs. Once inside the bay, there are few dangers.
 TRAILS AND SURVEY ROUTES Easy stream to inspect if the water is normal. Many gravel bars.
 AERIAL SURVEY NOTES Fair stream for aerial survey during normal and low water flows. Stream
 is best surveyed in late morning and early afternoon when the sun is high. Water extremely dark after rain.

INTERTIDAL ZONE

LENGTH 1.5 miles. AVERAGE WIDTH/DEPTH 100'5".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Varied but predominantly fine gravel.
 LOW TIDE LOCATION
 HIGH TIDE LOCATION Clearly defined grass flats.
 SCHOOLING AREAS Several large pools in the upper intertidal area.
 SPAWNING AREAS Good spawning facilities at the upper end.
 GENERAL NOTES Intertidal zone is a wide, shallow, continuous riffle with a large pool and deep area
 at the upper end. Four small tributaries enter the stream in the first three-eighths of a mile.

UPSTREAM

LENGTH ACCESSIBLE For length. AVERAGE WIDTH/DEPTH 70'20".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel, sand, and silt.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS None.
 TRIBUTARIES Several small tributaries are used by coho.
 SCHOOLING AREAS Pools throughout stream course.
 SPAWNING AREAS Good spawning riffles and considerable deep areas and pools, after first 150 yards.
 GENERAL NOTES Fish have been observed near extreme head of stream. Good open route to Security
 Bay for aerial survey; good shortcut.

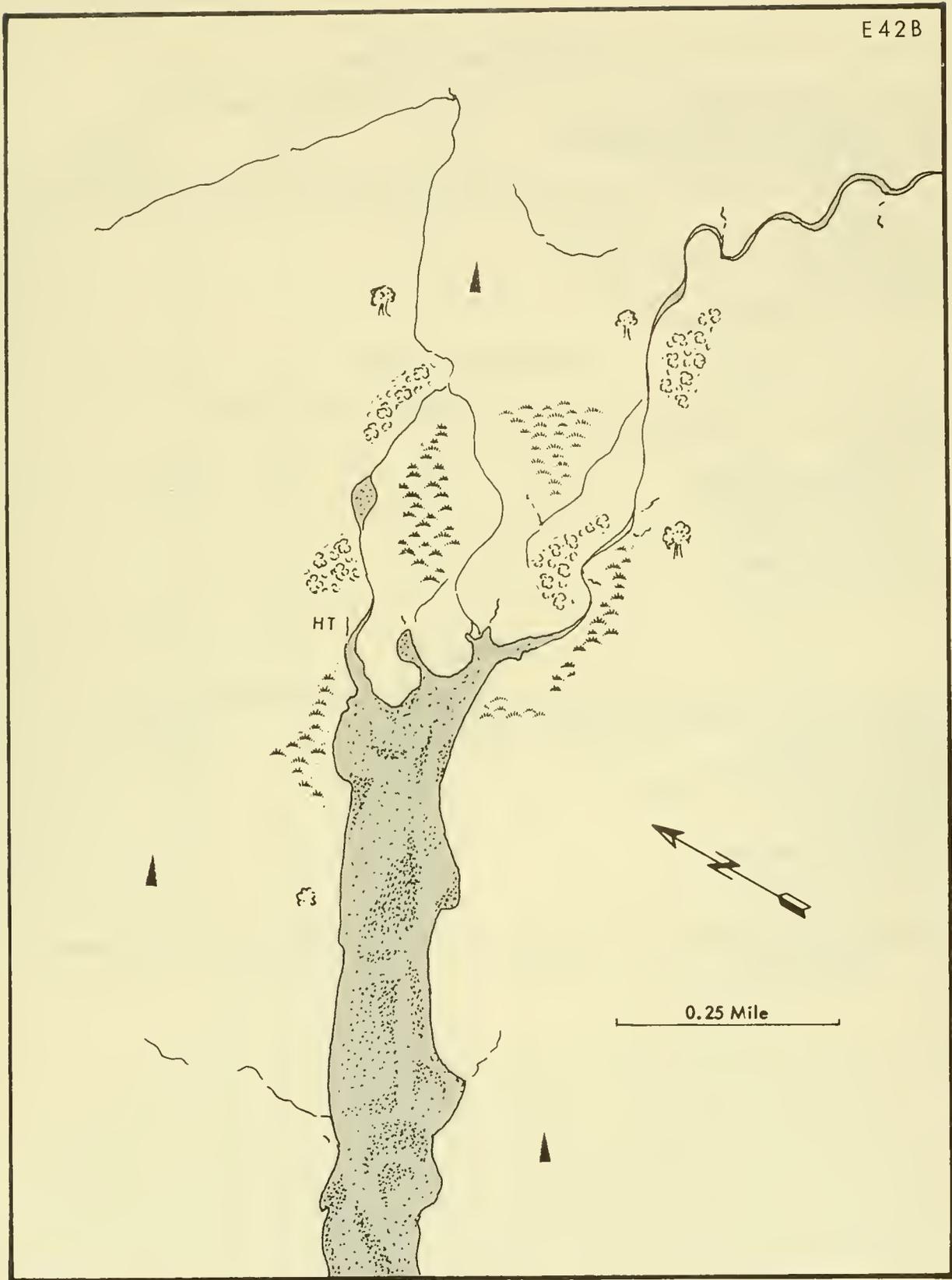
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 27	G 2.0	FWS	60,000		12,000		600 cohos	20,000 pinks at mouth
1951								
Sept 1	A 3.0	FWS						300 fish seen, appeared to be pink
Sept 10	G 0.5	FRI	3,000	0	30	3	3 cohos	Creek high but dropping
Sept 20	G 0.5	FRI	4,750	50	100	5	55 cohos	15% pinks spawning
Oct 1	G 0.5	FRI	500	250	11	32		Pink and chum spawning
1952								
Sept 12	G 0.6	FRI	530	1	0	1		Many jumps in bay
Sept 26	G 0.6	FRI	92	3	32	0	16 cohos	
1953								
Sept 9	G 0.6	FRI	280	0	0	60		Many jumps in bay
Sept 22	G 0.6	FRI	230	40	50	4	820 cohos	Pink spawning
1954								
Aug 24	G 0.6	FRI	1,000					Jumps in outer bay
Sept 1	A 3.0	FWS	300					300 pinks in estuary
Sept 9	G 0.6	FRI	3,000					1,000 at mouth. Few dead pink
Sept 10		FRI	2,000					14,000 at mouth
Sept 17	G 0.6	FRI	3,000					Some dead pink; chum in outer bay
1955								
Aug 14	G 5.0	FWS	100					500 pinks at mouth
Aug 21	G 5.0	FWS	100					300 pinks at mouth
Aug 26	G 0.6	FWS	150					500 pinks at mouth
Aug 27	G 5.0	FWS	200					500 pinks at mouth
Sept 4	G 5.0	FWS	2,400					400 pinks at mouth
Sept 15	G 1.5	FWS	3,000					
Sept 29	G 0.5	FWS	200		400			
1956								
Aug 12	G 1.0	FWS	0		150			
Sept 4	G 1.0	FWS	2,000		550			400 pinks, 200 chums at mouth
Sept 22	G 1.0	FWS	22,000		3,000			
1957								
July 25	G 0.2	FWS						No fish observed
Aug 1	G 0.2	FWS	20		200			
Aug 14	G 2.5	FWS	100		1,000		30 cohos	
1958								
Aug 13	G 1.0	FWS	750		100			
Aug 26	A 1.2	FWS	100		20			
Sept 14	G 2.0	FWS	500		100		35 cohos	
1959								
Aug 11	A 1.0	FWS	150					
Aug 17	G 0.2	FWS					200 cohos	No pinks or chums
Oct 6	G 0.5	FWS	1					

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1960								
Aug 25	A length	ADF						No fish observed
Aug 26	A mouth	ADF						200 at mouth
Sep 22	A length	ADF						No fish observed
Oct 17	A 2.0	ADF						No fish observed
1961								
Aug 1	A 1.0	ADF						Many pinks present
Aug 25	A length	ADF	10,000					
1962								
Jul 28	A 1.0	ADF	5,000		few			500 in intertidal zone
Aug 10	A 1.0	ADF						Pink present
Aug 13	A length	ADF	>5,000					
Aug 29	A length	ADF						1,000 in intertidal zone; impossible to survey
1963								
Aug 10	G 2.5	ADF	21,800		4,500			Jumps at mouth; fish in intertidal zone
Aug 19	A 3.0	ADF	4,000					Poor visibility
Aug 28	A length	ADF	dead fish					Peak past; 500 new fish at mouth
Sept 2	skiff inter- tidal zone	ADF						Coho jumps in bay; a few in intertidal zone, and coho present at mouth



EASTERN, CHATHAM STRAIT, ROWAN BAY, stream E. of 42C.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho.
ESCAPEMENT TIMING Middle, Aug.
SPAWNING FACILITIES Good.
STREAM TEMPERATURES
VALLEY DESCRIPTION Stream meanders through meadows for first mile from salt water; then into
timber.
DRAINAGE
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

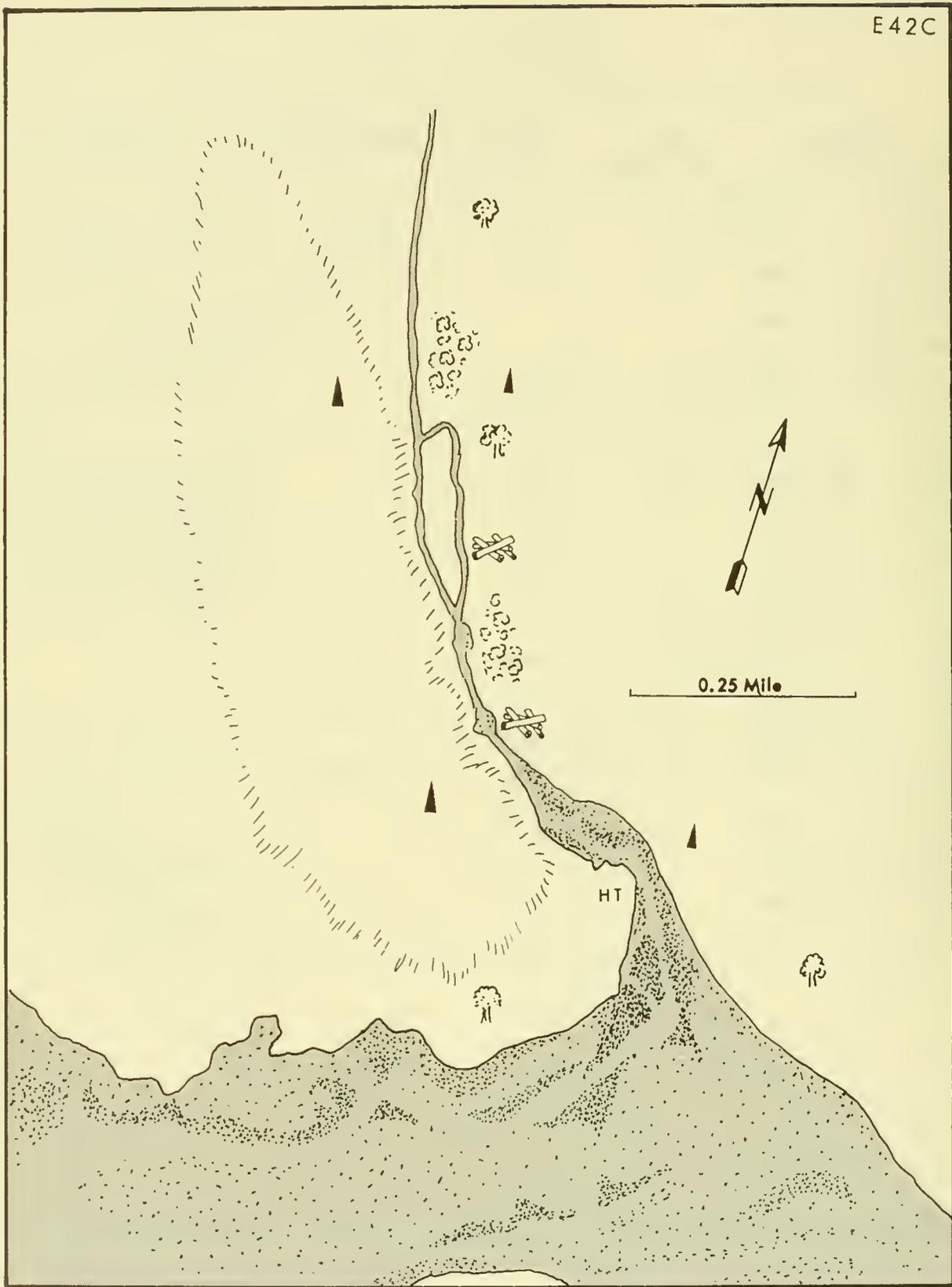
UPSTREAM

LENGTH ACCESSIBLE 1.5 miles. AVERAGE WIDTH/DEPTH 8'/10".
GRADIENT AND VELOCITIES Moderate current.
BOTTOM Gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES Although not a large stream, this stream affords spawning areas to an important
number of salmon.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 27	1.5	FWS	20,000		5,000		100 cohos	5,000 pinks at mouth
1943								
Sept 12	1.5	FWS	10		100			
1951								
Sept 1	G 1.5	FWS						150 fish in stream
1954								
Sept 1	A 1.5	FWS						150 fish in stream; few in bay
Sept 17	G 0.5	FWS	6,000		600			Pinks not peaked; chum far past
1956								
Aug 11	0.5	FWS	0		130			
Aug 18	2.0	FWS	200		200			50 chums at mouth
Aug 21	2.0	FWS	500		200			100 pinks and 500 chums at mouth
Aug 26	2.0	FWS			200			500 pinks and 100 chums at mouth
Sept 5	2.0	FWS	1,000		200			100 pinks and 100 chums at mouth
Sept 11	1.0	FWS	2,000					
Sept 22	0.5	FWS	1,000		4,000			
1957								
Aug 1	G 2.0	FWS			3			
Aug 14	G 1.5	FWS			50			
Sept 11	G 0.5	FWS	3		105			
Sept 26	G 0.2	FWS			700		20 cohos	
1958								
Sept 14	G	FWS	8		18			
1959								
Aug 28	A 2.0	FWS	25					200 salmon in salt water
1960								
Oct 17	A 1.0	ADF						No fish observed



EASTERN, CHATHAM STRAIT, ROWAN BAY, W. corner, W. arm.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho.

ESCAPEMENT TIMING Middle, Aug.

SPAWNING FACILITIES Excellent.

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE 2.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES Very difficult to inspect above 100 yards because of dense jungle
along the sides of the stream and continuous network of falls.

AERIAL SURVEY NOTES A typical chum stream.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES

BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1 mile.

AVERAGE WIDTH/DEPTH 6'/6".

GRADIENT AND VELOCITIES Moderate to swift.

BOTTOM Rubble.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

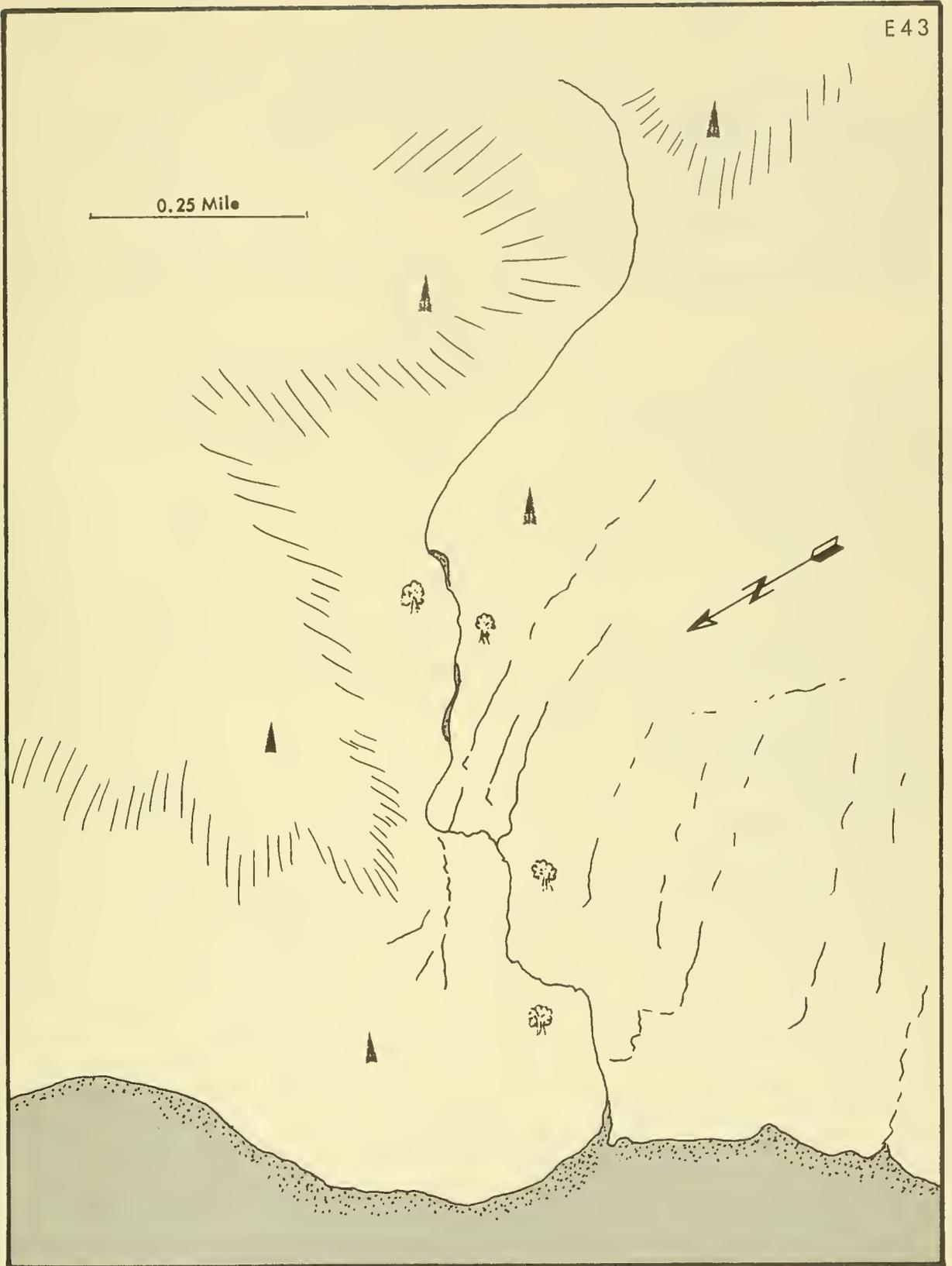
SPAWNING AREAS Excellent.

GENERAL NOTES A chum stream - small, minor producer.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 27	1.0	FWS	5,000		5,000			5,000 chums at mouth
1943								
Sept 12	1.0	FWS						200 chums at mouth
1954								
Aug 3	G 0.2	FWS			1,000			
Sept 17	G	FWS			500			200 chums and 100 pinks at mouth
1956								
Aug 13		FWS	200					
Sept 6	0.2	FWS			15			100 chums at mouth
Sept 22	0.5	FWS	1,000		2,000			
1957								
Aug 1	G 0.2	FWS	50		100			
Aug 14	G 1.5	FWS			200			
Aug 17	A 0.5	FWS						No fish observed
Sept 11	G 0.5	FWS	6		542			
Sept 26	G 0.7	FWS			30,000		500 cohos	
1958								
Sept 14	G	FWS	10		225			
Sept 21	G 2.0	FWS	200		120		100 cohos	
1959								
Aug 1	A 0.5	FWS						No fish observed
1960								
Aug 26	A mouth	ADF						No fish observed
Sept 22	A length	ADF						No fish observed
Oct 17	A length	ADF						No fish observed



56° 37.7' N. 134° 05.5' W.

EASTERN, CHATHAM STRAIT, BAY OF PILLARS, 0.5 mile from head, S. arm on E. side.

MAJOR SPECIES

OTHER SPECIES

ESCAPEMENT TIMING

SPAWNING FACILITIES

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE 1.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES Difficult to examine because of jungle-like growth and windfalls.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES

BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.1 mile.

AVERAGE WIDTH/DEPTH 3/4".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Poor.

GENERAL NOTES Very small stream with minor value as spawning area.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 28	0.1	FWS	200					1,000 pinks at mouth
1943								
Sept 11		FWS						No fish observed
1953								
Sept 14	G 0.2	FWS			300			
1954								
Aug 24		FRI						3,000 at mouth
1956								
Sept 12	G 1.0	FWS	100					
Sept 25	G 1.0	FWS	1,500					
Oct 1	G 0.7	FWS	3,400		2,250			
1957								
June 25 -								
July 16	G 0.2	FWS						No fish observed
Sept 11	G 0.1	FWS						No fish observed
1958								
Aug 26	A length	FWS						No fish observed
Sept 14	G length	FWS						No fish observed
1959								
Aug 17	A 0.2	FWS						No fish observed
1960								
		No record						
1961								
		No record						
1962								
Aug 13	A 0.5	ADF						500 salmon at mouth
1963								
Aug 19	A mouth	ADF						Overcast; poor visibility

56°32.6' N. 134°10.8' W. PILED RIVER CREEK

ADF STAT. No.
E 43B

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, PILED RIVER COVE, Head, 5 miles E. of Pt. Ellis.

MAJOR SPECIES Pink. OTHER SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 6.4 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 30'-50'/
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS

SPAWNING AREAS

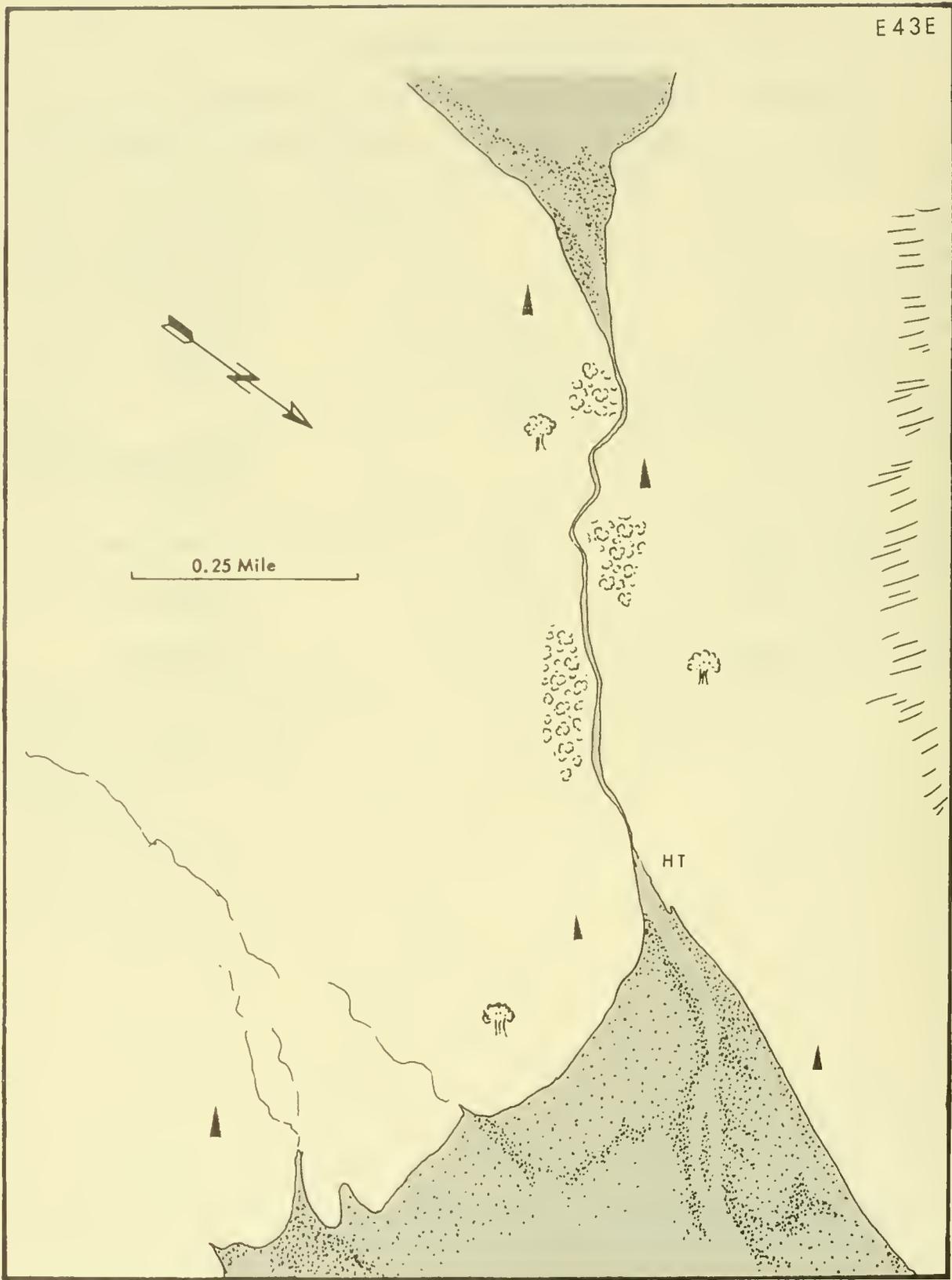
GENERAL NOTES

PILED RIVER CREEK

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1948 Sept 5	0.1	FWS	600					200 at mouth
1955 Aug 16	G 0.2	FWS						No fish observed
1956 Sept 4		FWS						324 pinks and 36 chums at mouth
Sept 16	0.7	FWS	220			30		25 pinks and 10 chums at mouth
Sept 25 1957	1.0	FWS	2,500			1,500		
Aug 17	A 1.0	FWS						400 at mouth, 350 salmon in stream
Sept 9 1958	G 0.2	FWS	123			10		
July 6	G 0.2	FWS						No fish observed
Aug 26	A 0.2	FWS				20		
Sept 14	G 0.5	FWS	280			60		170 pinks and 4 chums in tidal zone
1959 Aug 17	A 0.5	FWS						No fish observed



56° 35.6' N. 134° 07.2' W.

EASTERN, CHATHAM STRAIT, BAY OF PILLARS, W. head of S. arm.

MAJOR SPECIES Pink. OTHER SPECIES Chum, red, coho.
ESCAPEMENT TIMING Middle-late, Aug.
SPAWNING FACILITIES Good to excellent.
STREAM TEMPERATURES
VALLEY DESCRIPTION Wide, heavily wooded valley rising sharply away from the stream.
DRAINAGE 3.8 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION Stream flows out through long grass flats in SW. corner of bay.
ANCHORAGE At cannery site, use skiff to run to stream. Caution advised; salt water rapids into bay.
TRAILS AND SURVEY ROUTES This stream would be easy to inspect unless in flood stage, when it would be very difficult due to overhanging growth and lack of trails.
AERIAL SURVEY NOTES Best surveyed on right side when sun is fairly high in late morning or early afternoon. Good stream for aerial survey in periods of normal water flows. Becomes very dark after extensive rains.

INTERTIDAL ZONE

LENGTH 0.2 mile. AVERAGE WIDTH/DEPTH 75'/
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION Beginning of timber.
SCHOOLING AREAS Off stream mouth.
SPAWNING AREAS Good.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1 mile to lake. AVERAGE WIDTH/DEPTH 50'/10".
GRADIENT AND VELOCITIES Moderate to swift.
BOTTOM Coarse gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS None.
TRIBUTARIES None.
SCHOOLING AREAS Few holes throughout stream.
SPAWNING AREAS Riffles throughout stream.
GENERAL NOTES This stream could accommodate an important number of fish. Red run into lake is substantial and fairly large number of coho enter the bay in September.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1942								
Sept 28	0.7	FWS	50,000					
1949								
Aug 1		FWS	7,000					
Aug 31		FWS						Full of pinks; reds present
1950								
Aug 31	A	FWS						Few
1953								
July 20	A	FWS						No fish observed; agent reported good red escape-ment
1954								
Sept 1	A	FWS	1,500					
Sept 12	G 0.5	FWS	1,050		1,150			
1955								
July 10	G 1.0	FWS					50 reds	
July 17	G 1.0	FWS					150 reds	
July 24	G 1.0	FWS					75 reds	
Sept 16	G 0.5	FWS	500					
Sept 16	G 1.0	FWS	1,000		9,000			
1956								
Aug 13		FWS						No fish observed
Sept 4		FWS						3,000 near mouth
Sept 12	G 0.3	FWS	200					
Sept 25	G 1.0	FWS	25,000		5,000			
Oct 1	G 0.2	FWS	7,300		2,350			375 pinks and 50 chums at mouth
1957								
June 25		FWS						30 at mouth
July 16	G	FWS						200 reds in mouth
Aug 17	A 1.0	FWS						No fish observed
Sept 11	A lake	FWS	55		395		5 reds	
1958								
July 7	G mouth	FWS					50 reds	
July 10-14		FWS					2,000 reds	
July 17-19	G 1.0	FWS					10 reds	
Aug 9	G 0.5	FWS					25 reds	
Aug 10-11	G mouth	FWS						10-15 reds at mouth
Aug 17-18	G 0.5	FWS					7-21 reds	
Aug 26	A length	FWS						No fish observed
Sept 14	G length	FWS	35		240			
1959								
Aug 8	A to lake	FWS	75					
1960								
June 25	A length	ADF						No fish observed
Aug 29	A length	ADF					4,000 reds	
Oct 2	G mouth	ADF						No fish observed

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1961								
Aug 1	A bay	ADF						Several jumps
Aug 25	A to lake	ADF	5,000				2,500 redds	
Sept 9	A length	ADF	7,000				1,700 redds	
1962								
Aug 13	A length	ADF					500 redds	
Aug 29	A length	ADF	1,500				2,000 redds	2,000 in intertidal zone
1963								
Aug 19	A mouth	ADF						Overcast; no fish observed; no fish at mouth
Aug 28	Lake end outlet	ADF						56,000 at mouth; spawning area dry; outlet com- pletely dry for 200 yards

EASTERN, CHATHAM STRAIT, BAY OF PILLARS, 0.2 mile E. of F.L.P. Reduction Plant.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho.

ESCAPEMENT TIMING Late.

SPAWNING FACILITIES

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE 10.7 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES A pipeline extends along the right bank to the top of the cataracts.

There is a trail along the pipeline.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH 35'/12".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Large broken rock and boulders.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE

AVERAGE WIDTH/DEPTH 25'/5".

GRADIENT AND VELOCITIES Gentle to swift.

BOTTOM Considerable variation from bedrock to sand and silt.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS There is a 300 yard cataract area above the quarter mile mark above the mouth. Beyond the cataract area, there is a split.

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Excellent spawning gravel begins just above the split.

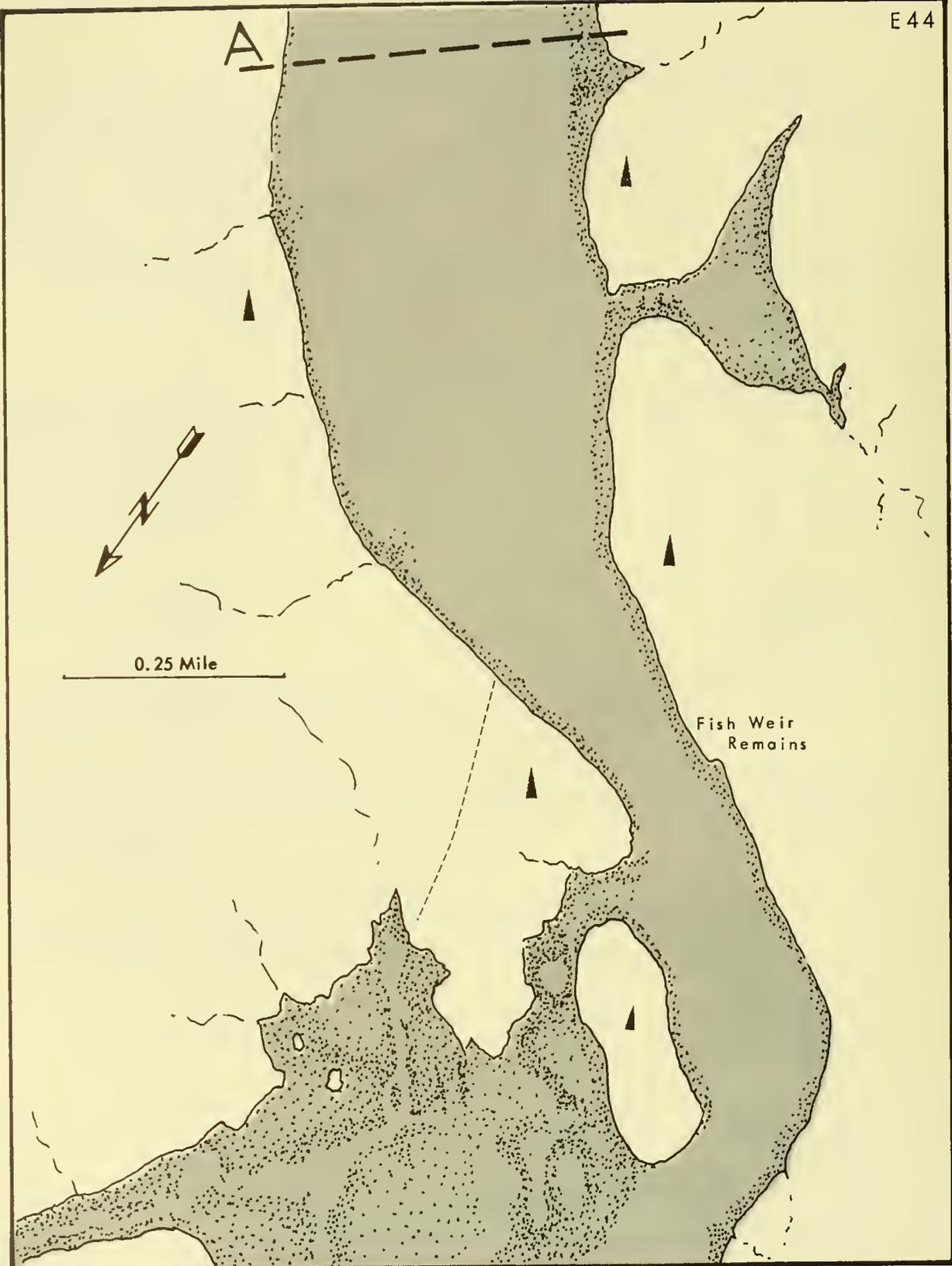
GENERAL NOTES Substantial coho producer. Coho school near reduction plant.

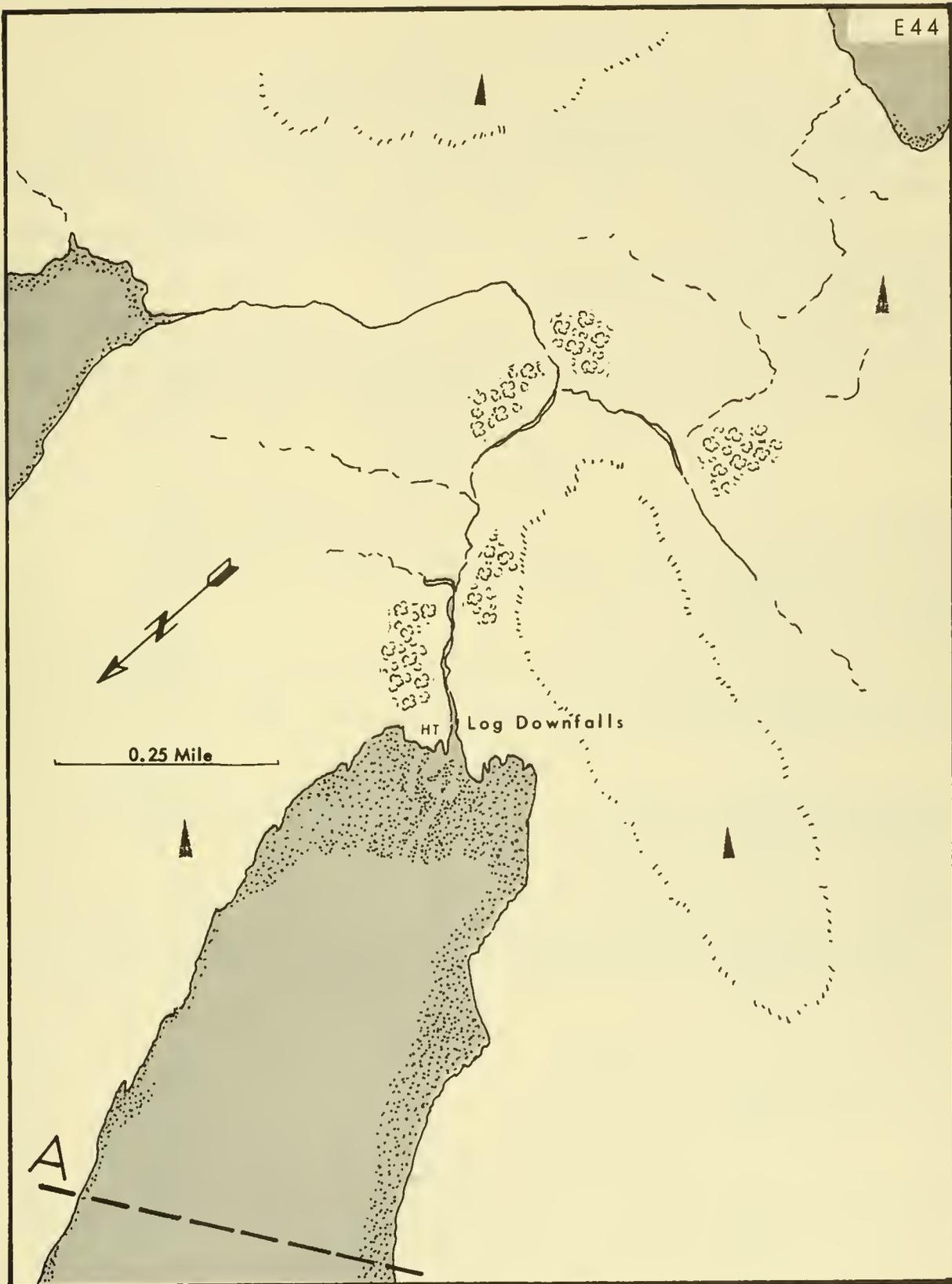
KWATAHEIN CREEK

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1949								
Sept 5 1953	G 0.6	FRI	300					
Sept 14 1955	G 0.5	FWS			400			
Aug 26	G 1.0	FWS		19				
Sept 29 1956	G 0.5	FWS	9,000					
Sept 12 1957	G 1.0	FWS	4,000		20			1,000 pinks at mouth
Aug 17	G 1.0	FWS						No salmon observed
Sept 11 1958	G 0.7	FWS	134		14			
Aug 26	A 1.0	FWS						No salmon observed
Sept 14 1959	G to falls	FWS	300		25			
Aug 28 1960	A 0.7	FWS	200					
Aug 25	A mouth	ADF						2 jumps
Oct 2 1961	G mouth	ADF						No salmon observed
Sept 9	A mouth	ADF						500 cohos in intertidal zone





S6° 33.3' N. 134° 04.5' W.

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, ELENA BAY, E. head.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Late. Aug. -Sept.

SPAWNING FACILITIES The streambed is composed of good spawning gravel, clean and medium-sized, for the first half mile above tidewater.

STREAM TEMPERATURES Cold range. Observed temperatures: 42° F., 9/4/49; 43.5° F., 9/2/50; 44° F., 9/17/50.

VALLEY DESCRIPTION This stream issues from a narrow mountain valley which appears to be quite steep further upstream.

DRAINAGE 7.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE The best approach is from the left side of the mouth and the stream is then shallow enough for wading.

TRAILS AND SURVEY ROUTES Difficult travel in upper stream. The stream is branched out all over the valley and is so filled with holes and overgrown banks that it cannot be followed.

AERIAL SURVEY NOTES Difficult above intertidal due to brush.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH 125'/8".

GRADIENT AND VELOCITIES Fast water.

BOTTOM Large rock and algae. An average of 110 feet of good gravel first one-third mile.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Off stream mouth.

SPAWNING AREAS There is a wide and excellent spawning area for the first one-eighth mile above the cataract at the mouth.

GENERAL NOTES This is a medium-sized stream with a cataract at the mouth.

UPSTREAM

LENGTH ACCESSIBLE 2.5 miles.

AVERAGE WIDTH/DEPTH 75'/6"-10".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Clean broken rock and gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS There have been recent reports of partial blocks by beaver dams on this stream.

TRIBUTARIES There are 2 feeder streams entering the main stream on the right side in the upstream area. These branches extend 2.5 miles back into the brushy valley.

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground survey are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 17	2.5	FWS	33,950		14,550			1,000 at mouth
1942								
Season		FWS	100,000		40,000			Seeding excellent
1943								
Sept 10	0.2	FWS	100					Seeding failure
1944								
Sept 19	0.2	FWS	1,500		1,500			
1945								
Sept 27	0.4	FWS	500		25,000			
1946								
Sept 29	0.5	FWS			10,000			
1948								
Oct 1		FWS	20,000		5,000			2,000 at mouth
1949								
Sept 4	G 0.2	FRI			1			
Sept 22		FWS						Stream 80% full
1950								
Aug 20	A	FWS	50					Seeding poor
Sept 2	G 0.6	FRI	3		4			
Sept 8	0.7	FWS			3			107 at mouth
Sept 17	G 0.5	FRI	67		69			
Sept 21	G 0.2	FRI	30		850			1,000 off mouth
1951								
Aug 26	0.5	FWS						No fish observed
1952								
Aug 25	A 0.7	FWS						About 300 fish in stream
Sept 16		FWS						Few chums in stream and off mouth
1953								
Sept 15	A 0.5	FWS	42		20			
1954								
Sept 14	G 0.5	FWS	11		15			
1955								
Sept 4	G 0.2	FWS						No fish observed. High water
Oct 1	G 0.7	FWS	5		750			
1956								
Aug 20		FWS					180 cohos	
Aug 21		FWS					500 cohos	
Sept 6		FWS						2 pinks and 200 chums at mouth
Sept 12	G 0.1	FWS	100					
Sept 15	0.7	FWS	5,000		100			
Sept 25	1.0	FWS	2,500		5			
Sept 30	G 0.5	FWS	3,300		4,100			60 pinks and 850 chums at mouth

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1957								
July 8	G	FWS						No fish observed
Aug 27	G	FWS						No fish observed
Sept 9	G 0.5	FWS	58		8			
1958								
June 27 -								
July 1	G 0.5	FWS						No fish observed
Aug 17	G 0.2	FWS						No fish observed
Sept 13	G 0.5	FWS						No fish observed in intertidal zone
1959								
Aug 28	A 1.0	FWS						No fish observed
1960								
No record								
1961								
Aug 20	A mouth	ADF						1,000 at mouth, 500 in intertidal zone
Sept 13	G 0.2	ADF	100		25			
1962								
July 28	A	ADF						No fish observed in intertidal zone
Aug 13	A	ADF						500 at mouth
Aug 29	A	ADF						No fish observed in intertidal zone
1963								
Aug 19	A mouth	ADF						Overcast; no fish at mouth
Aug 28	A 0.8	ADF						No fish observed in stream; 5,000 at mouth
Sept 5	G 0.2	ADF	30					Stream high; visibility good; fish in lower part of stream

U. S. Fish & Wildlife Service Weir Counts

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1948								
Sept 2	18	10						
Sept 3-8								Weir destroyed
Sept 15	200	25						
Sept 16	100							
Sept 17	350	30						
Sept 18	150	20						
Sept 19-21								Flooding
Sept 22	175							
Sept 23	350							
Sept 24	250	150						
Sept 25	200	350						
Sept 26	150	400						
Sept 27	100	400						
Sept 28	100	550						
Sept 29	75	650						
Sept 30		800						
Oct 1								Watchman removed
Totals	2, 218	3, 385						

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, ELENA BAY, 1 mile from head on W. side of bay.

MAJOR SPECIES Pink. OTHER SPECIES
 ESCAPEMENT TIMING Middle-late.
 SPAWNING FACILITIES Limited spawning area.
 STREAM TEMPERATURES
 VALLEY DESCRIPTION Very brushy valley.
 DRAINAGE 4.6 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES

INTER TIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH 6 1/2"
 GRADIENT AND VELOCITIES Moderate.
 BOTTOM Clean small gravel and shell.
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS
 SPAWNING AREAS

GENERAL NOTES The intertidal zone would provide the greatest spawning area of this stream.

UPSTREAM

LENGTH ACCESSIBLE 1.5 miles. AVERAGE WIDTH/DEPTH 5 1/3".
 GRADIENT AND VELOCITIES Moderate.
 BOTTOM Fine gravel and coarse rubble.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS
 TRIBUTARIES The stream forks one-eighth mile above the mouth and these forks turn into turbulent
 little courses and extend back into the brush 1.5 miles.
 SCHOOLING AREAS
 SPAWNING AREAS Limited.
 GENERAL NOTES

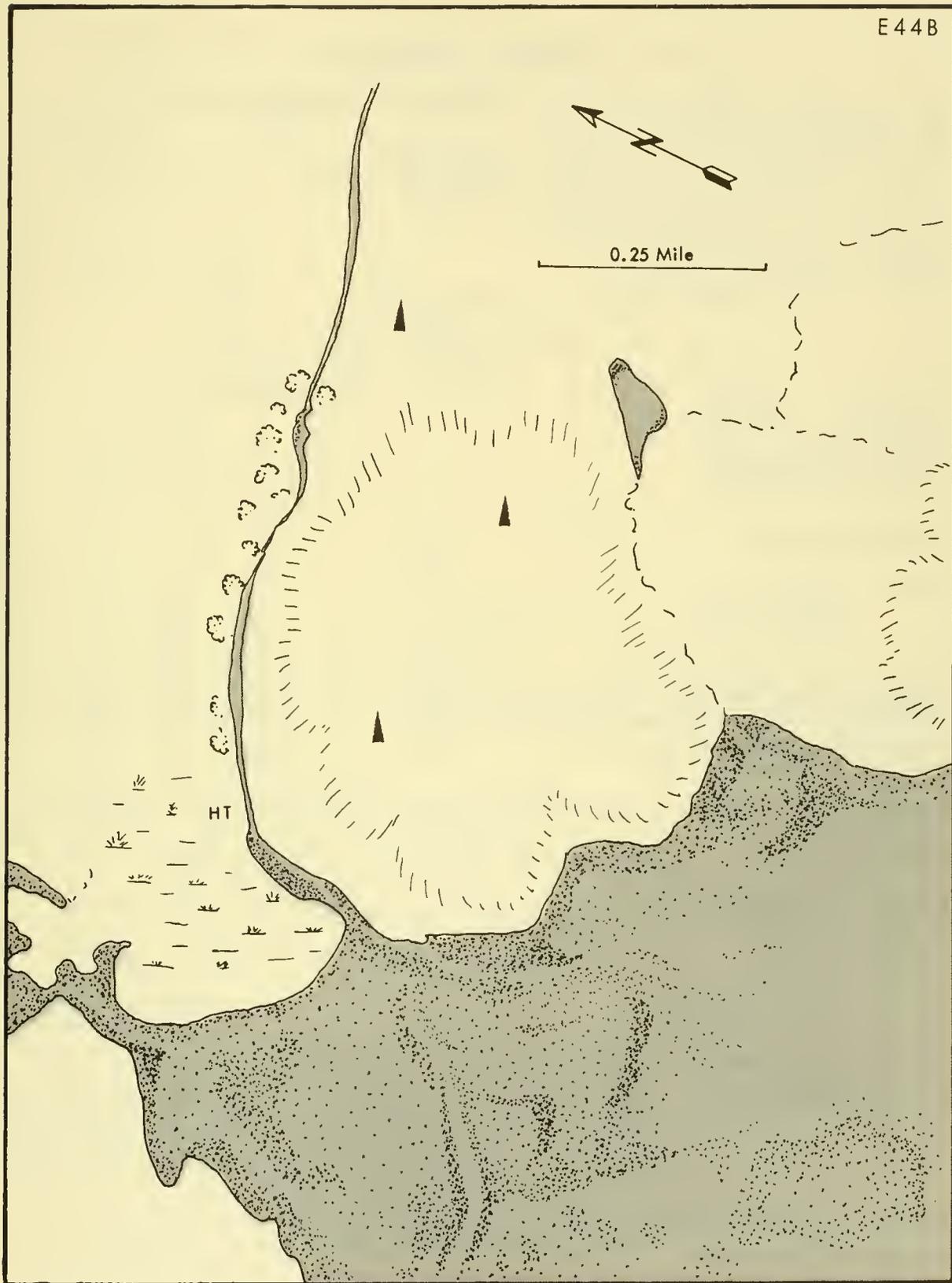
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 17 1942	1.5	FWS	15,000					5,000 at mouth
Sept 21 1943	0.5	FWS	5,000					
Sept 11 1944	1.0	FWS						2,000 at mouth
Sept 10 1945	0.2	FWS	150					
Sept 27 1948		FWS						5,000 at mouth
Oct 1 1949		FWS	5,000					
Aug 31 1950		FWS	500					
Aug 30 1951	A	FWS						No fish observed
Sept 2 1951	0.5	FRI	2,056		4			
Sept 17 1951	0.5	FRI	3,852	129	54	10		
Sept 21 1951	0.5	FRI	2,976	24	3	18		
1951								No record
1952								No record
1953								
Sept 15 1953	G 0.2	FWS	7					
Sept 14 1954	G 0.2	FWS	748		153			
Aug 22 1955	G 0.7	FWS						15 pinks at mouth
Sept 9 1956	G 0.7	FWS	20,000					
Sept 16 1957	1.0	FWS	320		40			700 pinks, 100 chums at mouth
July 8 1958	G	FWS						No fish observed
Aug 17 1958	A 0.5	FWS						No fish observed
Aug 27 1958	G	FWS						No fish observed
Aug 11 1959	G 0.2	FWS						No fish observed
Sept 13 1959	G 0.2	FWS						No fish observed
1959								No record
1960								No record
1961								
Sept 9 1961	A	ADF						2,500 at mouth, 800 in intertidal zone
July 28 1962	A	ADF						No fish observed
Aug 29 1962	A	ADF						1,500 at mouth

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1963								
Aug 19	A mouth	ADF						2,500 at mouth; overcast
Aug 28	A 0.8	ADF						No fish observed
Sept 5	G 0.9	ADF	100		25			



56° 26.4' N. 134° 02.7' W.

ADF STAT. No.

E 44B

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, E. PETROF BAY, E. of middle of long island.

MAJOR SPECIES Pink. OTHER SPECIES Chum.
ESCAPEMENT TIMING Late.
SPAWNING FACILITIES Fair.
STREAM TEMPERATURES
VALLEY DESCRIPTION The stream flows through a narrow gorge.
DRAINAGE 4.3 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE Off Alecks Creek.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Difficult to survey because of brush.

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.5 mile. AVERAGE WIDTH/DEPTH 30'/
GRADIENT AND VELOCITIES Steep; current swift.
BOTTOM Coarse gravel and rubble with deep pools and small gravelly areas at infrequent intervals.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES The stream receives a tributary brook from the eastern slope which also originates in a small lake.
SCHOOLING AREAS

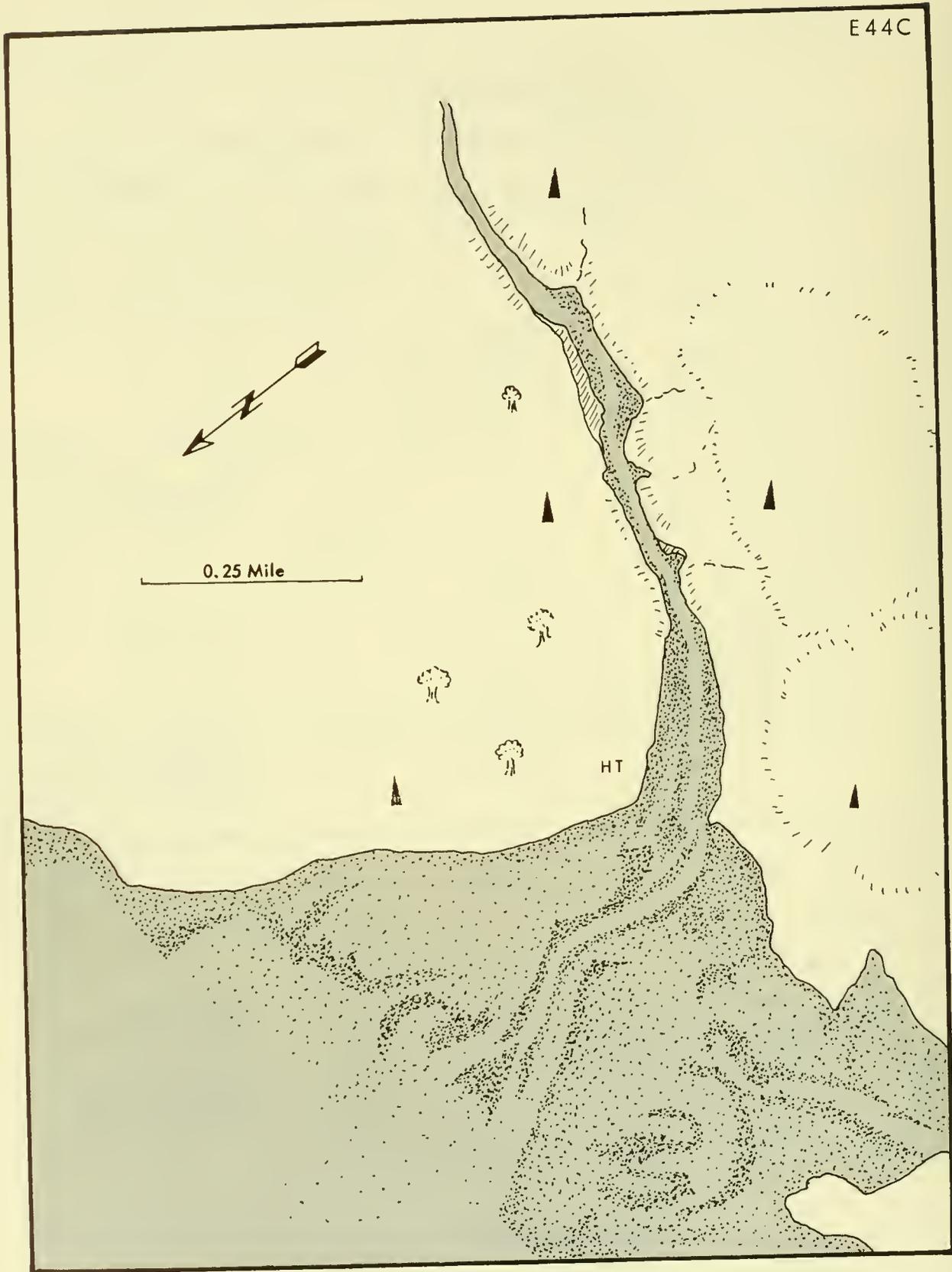
SPAWNING AREAS Fair.

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 18 1946	0.5	FRI	5,000					
Sept 30 1948	0.5	FRI	50,000					
Sept 15 1949		FRI	4,000		1,000			
Oct 1 1949		FRI	35,000					Some chum
Aug 31 1950		FRI	30,000					
Sept 23 1950		FRI						80% filled
Aug 30 1953	A	FRI						No fish observed
Sept 8 1953	3.5	FRI	6,500			2		
Sept 15 1954	G 0.5	FWS	17		175		3 cohos	
Sept 15 1955	G 0.1	FWS	25		500			
July 9 1955	0.1	FWS						No fish observed
Aug 22 1956	0.1	FWS						No fish observed
Oct 1 1956	0.5	FWS	1,150		25			
Sept 13 1957	0.5	FWS	2,400		1,400			1,500 pinks and 350 chums at mouth
Sept 30 1957	0.2	FWS	1,900		1,650			800 pinks and 500 chums at mouth
Sept 10 1958	G 0.2	FWS	9		457			75% spawning
Sept 13 1959	G 0.5	FWS				8		
1959								No report
1960								No report
1961								
Aug 20 1962	A	ADF						700-800 at mouth
Aug 25 1962	A length	ADF						Spawning to beaver dam
July 28 1962	A	ADF						200 salmon at mouth
Aug 8 1962	A	ADF						300 salmon at mouth
Aug 13 1963	A 0.5	ADF	present					1,000 salmon at mouth
Sept 5 1963	G 0.5	ADF			500			



56°28.5' N. 134°01.8' W.

ADF STAT. No.
E 44C

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, ELENA BAY, E. head of S. arm.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho.
ESCAPEMENT TIMING Middle-late.
SPAWNING FACILITIES Excellent.
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 3.7 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH 100'/18"-3.5'.
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 3.7 miles. AVERAGE WIDTH/DEPTH 100'/18".
GRADIENT AND VELOCITIES Moderate. Gradual.
BOTTOM Fine sandy gravel; medium rubble.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES The stream has a number of small tributaries and 1 large tributary about 1 mile upstream
which drains a large lake on the E. slope.
SCHOOLING AREAS

SPAWNING AREAS Excellent.

GENERAL NOTES This is a large stream carrying a large flow of water. It is suggested that escapement data for stream 44C and stream 44D may be intermingled due to some uncertainty in the stream numbers on this data.

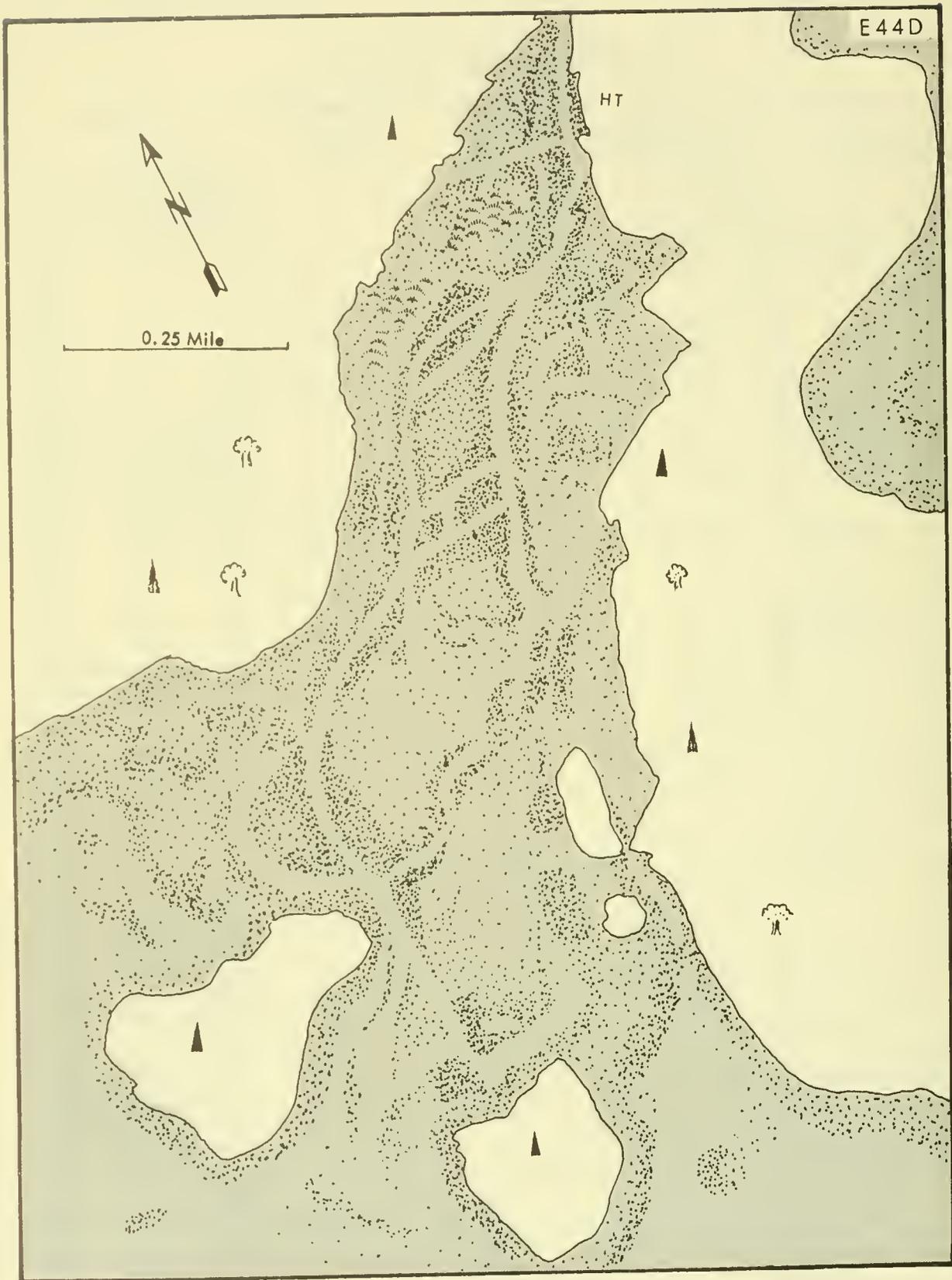
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 18	2.2	FRI	50,000					Some chum
1942								
Sept 21	1.0	FRI	30,000					
1944								
Sept 20	0.6	FRI	42,000		3,000			
1948								
Sept 15	0.5	FRI	15,000					
Oct 1		FRI	9,000		5,000			
1949								
Sept 4	G 0.2	FRI	5,000					3,000 off mouth
Sept 20	G	FWS	6,500	180	79	140		
1950								
Sept 2	G 0.5	FRI	2,056		4			
Sept 17	G 0.5	FRI	3,852	129	54	10	6 cohos	
Sept 21	G 0.5	FRI	2,976	24	3	18		
1951								
Sept 10	A 0.5	FRI	6,600	65	16	0		20% spawning
Sept 20	A 0.5	FRI	13,300	255	47	15		12% spawning
Oct 1	A 0.5	FRI	4,600	1,000	90	100		75% pinks spawning
1952								
Sept 12	A 0.5	FRI	5,420	11	1	0		Stream flooding
Sept 27	A 0.5	FRI	770	2,230	0	0		Pink run over
1953								
Sept 10	A 0.5	FRI	1,100		25	1		Numerous jumps in bay
Sept 23	A 0.5	FRI	400	104	30	4	2 cohos	Pink spawning over
1954								
Aug 24	A 0.5	FRI	1,800	0	0	0		500 off mouth. Jumps outside
Sept 9	G	FRI	13,000					Few dead pinks. 14,000 at mouth
1955								
July 9	G 0.5	FWS	0		0		3 reds	
July 30	G 0.3	FWS	0		0		200 reds	
July 31	G 0.5	FWS	0		0		250 reds	
Aug 7	G 0.2	FWS	40		0		50 reds, 10 cohos	
Aug 17	G 0.3	FWS	200		0			50 pinks at mouth
Aug 21	G 0.2	FWS	5,000		0			5,000 pinks at mouth
Aug 26	A 0.5	FRI	20,000		0			Many in bay and mouth
Sept 5	A 0.5	FRI	35,000		0			5,000 between marker and lake
1956								
Aug 11	G 1.0	FWS	0		0			100 pinks and 100 chums at mouth
Aug 19	G 1.0	FWS	100		25			None at mouth
Aug 26	G 1.0	FWS	1,500		0			>5,000 pinks at mouth
Sept 2	G 1.0	FWS	100		1,100			
Sept 4	G 1.0	FWS	0		0			100 pinks and 1,100 chums at mouth
Sept 7	G 1.0	FWS	20,000		0			>20,000 at mouth and >50,000 in bay

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Sept 12	G 1.0	FWS	35,000		0			>100,000 at mouth, >50,000 in bay
Sept 20	G 0.5	FWS	4,200		3,600			
Sept 25	G 1.0	FWS	3,500		2,500			
1957								
July 19	G	FWS	20				20 reds	
July 31	G	FWS	1,500					
Aug 9	G	FWS	3,000					
Aug 11	G 1.5	FWS	1,000		50			
Aug 18		FWS					20 reds	
Aug 25	A marker	FRI	1,500					2,000 pinks and 1 chum at mouth
Sept 2	A marker	FRI	2,500					300 at mouth
Sept 8	G 1.0	FWS	1,407		18			221 pinks and 3 chums in intertidal zone
Sept 12	A marker	FRI	1,200		300			
Sept 25	G to lake	FWS	1,500				1,000 cohos	
1958								
July 29	G	FWS					24 reds	
Aug 10	G 0.2	FWS	50					
Aug 18	G 2.0	FWS	50		12		150 reds	
Aug 25	A	FRI	0		0			None observed off mouth
Sept 12	G 1.2	FWS	580		60			>120 pinks in high tide zone
Sept 17	marker	FWS	100					
Sept 17	A	FRI	100		0			None off mouth
1959								
July 21	A 0.5	FWS						No salmon observed
1960								
No record								
1961								
Sept 13	G 1.0	ADF	50,000		200			
1962								
Aug 8	A	ADF						3,000 at mouth
Aug 10	A 1.0	ADF						20,000 at mouth
Aug 13	A length	ADF	15,000					15,000 at mouth
Aug 29	A length	ADF	36,000				5,000 reds	9,000 at mouth; 25,000 in intertidal zone
Sept 9	G 0.5	ADF						No fish observed
1963								
Aug 19	A length	ADF						5,000 pinks at mouth; 1,000 in intertidal zone
Aug 28	A 1.0	ADF						3,000 in intertidal zone; many dead
Sept 3	G 0.7	ADF			1,300			Log jam (seemed impass- able)



56° 30. 2' N. 134° 02. 5' W. ALECKS CREEK

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, 1.5 miles E. of entrance to Elena Bay.

MAJOR SPECIES Pink. OTHER SPECIES Chum, red, coho.
 ESCAPEMENT TIMING Middle-late.
 SPAWNING FACILITIES Excellent. Nearly continuous spawning riffles of coarse gravel.
 STREAM TEMPERATURES Normal-range. Observed temperatures: 57° F., 9/4/49; 53° F., 9/2/50;
 53° F., 9/17/50; 56° F., 9/10/51; 53° F., 9/20/51; 50° F., 10/1/51; 51° F., 9/12/52; 51.5° F.,
 9/27/52; 54° F., 9/10/53; 49° F., 9/23/53.
 VALLEY DESCRIPTION Comparatively wide valley, thickly-covered with brush. Upper course
 winds through brushy valley.
 DRAINAGE 8.3 square miles (polar planimeter).
 STREAM MOUTH IDENTIFICATION
 ANCHORAGE Anchor just S. of 2 islands close to mouth of stream in 2.5 fathoms, well-sheltered from
 all winds. Sticky bottom.
 TRAILS AND SURVEY ROUTES Stream is easy to wade at low to normal water stages.
 AERIAL SURVEY NOTES Easy to survey except after heavy rains; light sometimes a problem due to
 timber.

INTERTIDAL ZONE

LENGTH 0.5 mile. AVERAGE WIDTH/DEPTH 60'/12".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel.
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS Several large pools.
 SPAWNING AREAS Continuous riffle offering excellent spawning in the upper 200 yards.
 GENERAL NOTES Very heavily used during normal runs.

UPSTREAM

LENGTH ACCESSIBLE To lake. AVERAGE WIDTH/DEPTH 60'/12".
 GRADIENT AND VELOCITIES Gentle.
 BOTTOM Gravel, some sand, and silt.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS None.
 TRIBUTARIES Considerable splitting in upper portion.
 SCHOOLING AREAS Plenty of good resting pools under windfalls and log jams.
 SPAWNING AREAS Good spawning facilities. Continuous riffle.
 GENERAL NOTES Local residents call this stream Sockeye Creek. There is good spawning area for
 red salmon above lake. It is suggested that escapement data for stream 44C and stream 44D may
 be intermingled due to some uncertainty in the stream numbers on this data.

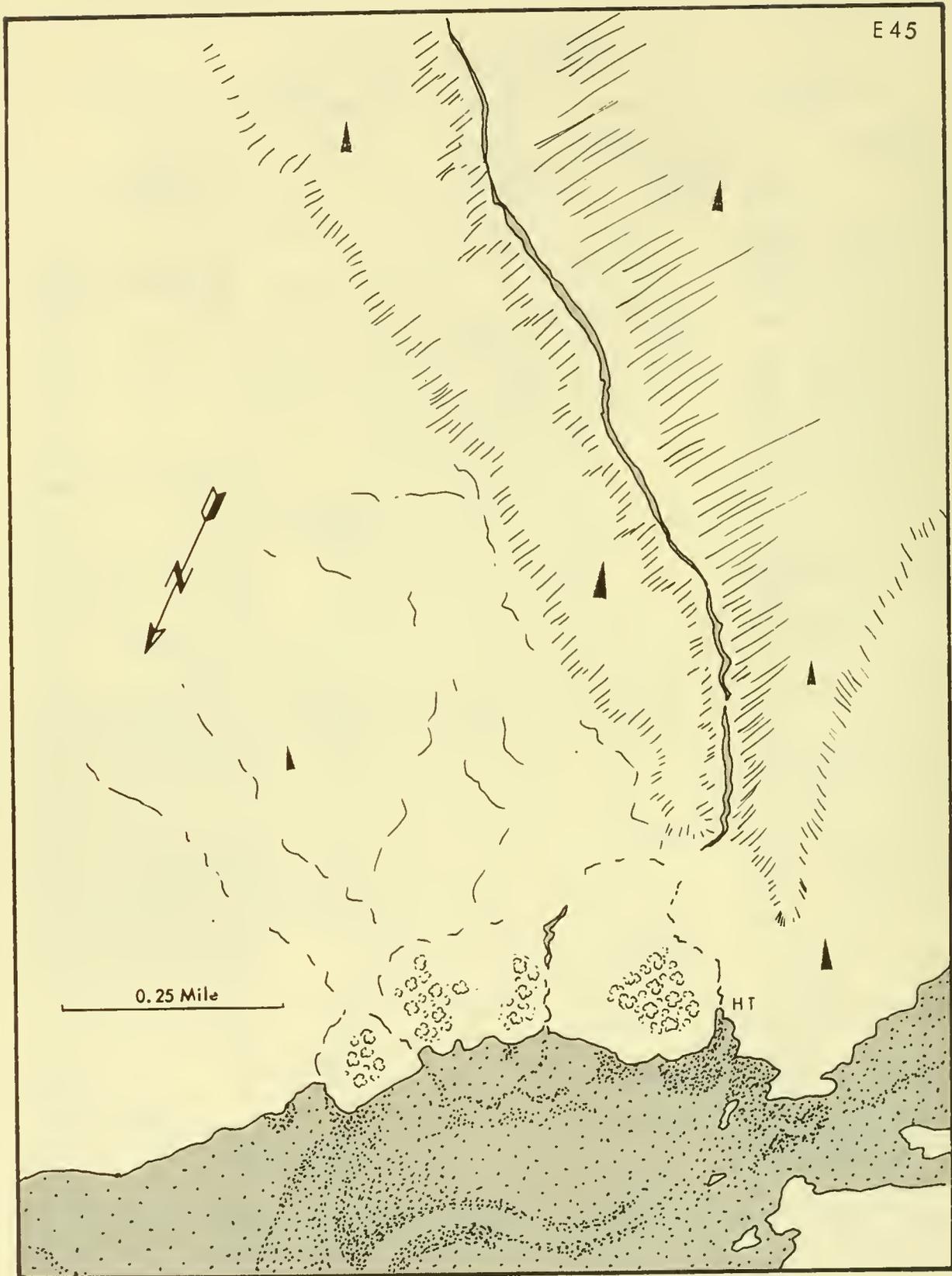
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 18	0.7	FWS	125,000					75,000 at mouth
1943								
Sept 10	3.0	FWS	25,000					50,000 at mouth
1944								
Sept 20	1.2	FWS	67,500		7,500			
1946								
Sept 29	1.0	FWS	50,000					
1947								
Oct 5	3.7	FWS	150,000		25			
1948								
Oct 1		FWS	100,000					A few chums
1949								
Aug 30		FWS	35,000					
Sept 6		FWS	15,000					
Sept 9		FWS	15,000					
Sept 23		FWS						90% filled
1950								
Aug 30	A	FWS						No fish observed
Sept 8	3.5	FWS	6,500		2			
1951								
Aug 26	1.5	FWS	10,000		4			10,000 pinks at mouth
Sept 18	0.7	FWS	20,000		1,000		75 cohos	1,000 pinks at mouth
1952								
Aug 26	A 1.5	FWS						Good seeding of pinks
Sept 16		FWS						10,000-20,000 pinks in first bed
1953								
July 19	G 1.0	FWS					300-400 reds	
Aug 5	A 0.5	FWS	100					
Aug 21	G 1.0	FWS	60					
Sept 15	G 1.0	FWS	3,100		76			
1954								
July 22	G	FWS					75 reds	
Aug 12	G	FWS	65		5		100 reds	2,000 pinks and 500 reds at mouth
Aug 24	G	FWS	1,800		200			3,000 pinks in bay and at mouth
Sept 1	A	FWS	8,000					Estuary
Sept 13	G 0.5	FWS	15,600				3 cohos	10,000 pinks at mouth
1955								
Aug 22	G 0.5	FWS						No fish observed
Sept 17	G 1.5	FWS	100,000					15,000 pinks at mouth
Oct 1	G 0.7	FWS	20,000					Plus 5,000 spent
1956								
Aug 10		FWS						20 chums at mouth
Aug 20	0.5	FWS			100			
Sept 2		FWS	10,000		30,000			
Sept 4		FWS						28,000 pinks and 12,000 chums at mouth
Sept 12	1.0	FWS	10,000					25,000 pinks at mouth

ESCAPEMENT RECORD - Continued

Date	SURVEYED		By	PINK		CHUM		OTHER SPECIES	REMARKS
	Miles			Live	Dead	Live	Dead	Live	
1956									
Sept 26	1.0		FWS	50,000		5,000			
Sept 30	1.2		FWS	80,000		200			600 pinks at mouth
1957									
July 25	G		FWS			50			
Aug 17	A 0.5		FWS						200 fish in salt water
Aug 18	G		FWS						Few pinks; 500 chums at mouth
Sept 9	G 0.2		FWS	71		258			
1958									
Aug 7	G 0.2		FWS			500			
Aug 12	G 0.2		FWS			200			
Aug 16	G 0.2		FWS			50			
Sept 13	G 0.2		FWS			2			
1959									
Aug 11	A 0.5		FWS						300 chums and 150 pinks in salt water
Oct 7	G 1.5		FWS	417				60 cohos	
1960									
June 24	A to lake		FWS						No salmon observed
Oct 17			FWS						No salmon observed
1961									
Sept 9	A to lake		ADF						57,000 mixed, 200 red jumps
1962									
July 28	A mouth		ADF						1,500 pinks at mouth
Aug 25	to lake		ADF					600 reds in inlet	2,500 in intertidal zone
Sept 5	G 1.2		ADF						3,500 mixed in stream; 300 in intertidal zone
1963									
Aug 19	A mouth		ADF						1,500 pinks at mouth; overcast
Aug 28	to lake		ADF					600 spawning reds	2,000 at mouth; 2,500 in intertidal zone
Sept 5	G 1.2		ADF					3,500 mixed fish	Cohos coming in; 300 fish at mouth



56° 21.8' N. 134° 02.6' W.

ADF STAT. No.

E 45

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, PETROF BAY, E. central shore.

MAJOR SPECIES Chum.

OTHER SPECIES Pink.

ESCAPEMENT TIMING Middle-late.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE 2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES One mile from the mouth, the stream flows through a very brushy area with the growth down to the edge of the water.

AERIAL SURVEY NOTES The stream originates in a small lake.

INTERTIDAL ZONE

LENGTH

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES

BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES This is a fair-sized stream which empties into the bay through a fan-shaped tideflat through many branches.

UPSTREAM

LENGTH ACCESSIBLE 1 mile.

AVERAGE WIDTH/DEPTH 50'/

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Live	By	Live	Dead	Live	Dead	Live	
1940								
Sept 19	1.0	FWS	63,000		7,000			
1942								
Sept 21	0.5	FWS	45,000		5,000			
1943								
Sept 10	1.0	FWS			10,000			30,000 at mouth
1944								
Sept 21	0.3	FWS						8,000 at mouth
1945								
Sept 27	1.0	FWS						40,000 at mouth
1946								
Sept 29		FWS						100,000 at mouth
1948								
Oct 1		FWS			5,000			30,000 at mouth
1949								
Aug 28		FWS						30,000 at mouth
Sept 23		FWS						80 per cent filled
1951								
Aug 27	0.2	FWS	9		3			100 pinks at mouth
1953								
Sept 16	G 0.5	FWS	5		47			Poor
1954								
	No record							
1955								
	No record							
1956								
Sept 4		FWS	225		4,750			250 pinks and 4,275 chums at mouth
Sept 12	0.2	FWS						150 pinks at mouth
Sept 15	1.0	FWS	2,450		300			600 pinks and 100 chums at mouth
Sept 25	1.0	FWS	1,500		1,000			Good seeding
Sept 29	0.6	FWS	9,700		22,000			175 pinks and 50 chums at mouth
1957								
Aug 17	A 0.5	FWS						No fish observed
Aug 25	G 0.2	FWS	65		6			
Sept 10	G 0.2	FWS	135		206			
1958								
Aug 9	G 0.2	FWS						No fish observed
Sept 13	G 0.3	FWS	12		3			
1959								
Aug 28	A 0.5	FWS	75					500 salmon in salt water
Oct 7	G 0.2	FWS						No fish observed
1960								
Oct 17	A length ADF							No fish observed
1961								
Sept 14	G 0.7	ADF	600		900	384		200 pinks at mouth
1962								
	No record							

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1963								
Aug 19	A mouth	ADF						200 pinks at mouth
Aug 28	A	ADF						Carcasses indicate heavy seeding
Sept 9	G 0.2	ADF						120 mixed fish in stream; 2,500 fish at mouth; water too dark to see

56°21.7' N. 134°03.9' W.

ADF STAT. No.
E 45A

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, PETROF BAY, W. central shore.

MAJOR SPECIES Pink. OTHER SPECIES Chum.
ESCAPEMENT TIMING Middle-late.
SPAWNING FACILITIES Streambed is well suited for spawning.
STREAM TEMPERATURES
VALLEY DESCRIPTION Dense, brush-covered valley.
DRAINAGE 2.4 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.7 mile. AVERAGE WIDTH/DEPTH 55"/10".
GRADIENT AND VELOCITIES Moderate.
BOTTOM Medium to fine gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES There is 1 small tributary entering the stream which drains a pond on the W. slope.
The stream branches about 0.7 mile upstream.
SCHOOLING AREAS
SPAWNING AREAS Excellent.
GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 19	0.7	FWS	51,000		9,000			
1942								
Sept 22	0.5	FWS	15,000		5,000			
1943								
Sept 9	0.5	FWS			25,000			20,000 fish at mouth
1944								
Sept 21	0.2	FWS	1,200		800			
1948								
Oct 1		FWS	10,000					
1953								
Sept 15	G 0.2	FWS	14		350			Many dead chum along banks
1954								
	No record							
1955								
Aug 6	G 0.2	FWS						No fish observed
Aug 22	G 0.2	FWS	50		8			
1956								
Sept 12	0.2	FWS						5,000 pinks at mouth
Sept 25	1.0	FWS	3,500		3,500			
1957								
Aug 17	A 2.0	FWS						Water too low for fish
Aug 25	G 0.2	FWS			4			
Sept 9	G 0.2	FWS	112		294			
1958								
Aug 17	G 0.2	FWS						No fish observed
Sept 13	G 0.2	FWS						12 pinks and 66 chums in tidal zone
1959								
Aug 28	A 0.5	FWS	500		200			
1960								
Oct 17	A length	ADF						No fish observed
1961								
Aug 20	A	ADF						500 at mouth
Sept 9	A mouth	ADF						4,000 in intertidal zone
1962								
Aug 29	A mouth	ADF						1,500 at mouth
Sept 9	G 1.5	ADF	200		2,500			Good distribution all the way upstream
1963								
Aug 19	A mouth	ADF						Brushy and dark
Sept 7	G 0.5	ADF			1,000			Water high and dark

56° 20.6' N. 134° 03.3' W.

ADF STAT. No.

E 45B

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, PETROF BAY, head of large bight on SE. corner.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle-late.

SPAWNING FACILITIES Has good spawning facilities for one-quarter of a mile.

STREAM TEMPERATURES Observed temperature: 54° F., 9/4/49.

VALLEY DESCRIPTION Brush valley.

DRAINAGE Approximately 2 square miles.

STREAM MOUTH IDENTIFICATION

ANCHORAGE A skiff can best be left at the left bank by a small, steep beach.

TRAILS AND SURVEY ROUTES The stream is easy to travel.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.2 mile.

AVERAGE WIDTH/DEPTH 10' / 2"

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Fine gravel and shells.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.08 mile.

AVERAGE WIDTH/DEPTH 8' / 3"

GRADIENT AND VELOCITIES Moderate.

BOTTOM Small, broken rock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS Many holes under logs.

SPAWNING AREAS

GENERAL NOTES This is a small stream which branches at the timber edge into two small brooks, each of which extends about 150 yards into the timber where impassable falls prevent the further ascent of salmon.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 19	0.1	FWS	1,500					Capacity
1942								
Sept 22	0.1	FWS	5,000		1,000			Heavy
1948								
Oct 1		FWS	3,000					Excellent
1949								
Sept 4	G 0.2	FWS	10			170		
1953								
Sept 16	G 0.2	FWS	7			42		
1954								
Sept 15	G 0.2	FWS	42			180		4,000 pinks and 1,000 chums in estuary
1955								
Oct 2	G 0.2	FWS	400			30		
1956								
Sept 2		FWS	5,800			200		4,400 pinks at mouth
Sept 12	0.2	FWS	100					5,000 pinks at mouth
Sept 25	0.5	FWS	1,500			1,000		
1957								
Sept 10	G 0.2	FWS	8			113		
1958								
Aug 9	G 0.2	FWS						No fish observed
Sept 13	G 0.2	FWS				9		
1959								
	No record							
1960								
Oct 17	A length	ADF						No fish observed
1961								
Sept 9	A 1.0	ADF						Dead pinks present; most of fish spawned
1962								
	No record							
1963								
Aug 28	A	ADF						Jumps at mouth
Sept 9	G 0.2	ADF				130		Water high and dark

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, PETROF BAY, head of W. arm.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle-late.

SPAWNING FACILITIES Good but limited because of size of stream.

STREAM TEMPERATURES Observed temperature: 49° F., 9/4/49.

VALLEY DESCRIPTION Valley overgrown with brush.

DRAINAGE

STREAM MOUTH IDENTIFICATION

ANCHORAGE Leave skiff at the wooded point on the right hand side near the mouth

TRAILS AND SURVEY ROUTES Game trails along banks. Easy walking along gravel bars.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.12 mile.

AVERAGE WIDTH/DEPTH 12 1/2"-6".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Fine gravel and shells.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.7 mile.

AVERAGE WIDTH/DEPTH 12 1/3".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Broken rock gravel; good.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS No serious obstructions.

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Good.

GENERAL NOTES This stream averages about 30' in width for three-quarters of a mile upstream.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 19	0.7	FWS	15,000					
1942								
Sept 22	0.5	FWS	6,000		1,000			
1948								
Aug 28		FWS	30,000					
Oct 1		FWS	15,000		7,000			Seeding excellent
1949								
Sept 4	0.2	FRI	15		125	12		
1954								
Sept 15	G 0.2	FWS	78		250			70% chums and 30% pinks in bay
1955								
Aug 6	G 0.2	FWS						No fish observed
1956								
Sept 12		FWS						10,000 pinks at mouth
Sept 25	A 1.0	FWS	10,000		3,000			
1957								
								No record
1958								No record
1959								No record
1960								No record
1961								
Sept 15	G 1.5	ADF	2,000		600		200 cohos	Many dead
1962								
Aug 29	A 0.5	ADF			300			500-600 at mouth
Sept 8	G 0.5	ADF						Few jumps
1963								
Aug 19	A mouth	ADF						1,500 at mouth; brushy, overcast

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, THETIS BAY, central E. shore.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle-late.

SPAWNING FACILITIES One mile above the edge of the timber is a fine gravel streambed providing excellent spawning area. Good spawning through 1 mile of grassy tideflats.

STREAM TEMPERATURES

VALLEY DESCRIPTION A low valley.

DRAINAGE 3.3 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 1 mile of tideflats.

AVERAGE WIDTH/DEPTH 60'/

GRADIENT AND VELOCITIES

BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 3.5 miles.

AVERAGE WIDTH/DEPTH 60'/

GRADIENT AND VELOCITIES Moderate.

BOTTOM Fine gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Excellent.

GENERAL NOTES This is a large stream and one of the better streams in Tebenkof Bay.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 19	3.5	FWS	100,000		25,000			Excellent
1942								
Sept 22	1.0	FWS	35,000		8,000			Heavy
1943								
Sept 9	3.0	FWS	10,000					Poor
1948								
Oct 1		FWS	25,000		25,000			Excellent
1953								
Aug 18	G 1.0	FWS		0		200		
Sept 16	G 0.2	FWS		7		200		
1954								
	No record							
1955								
July 25	G 0.2	FWS						No fish observed
Aug 22	G 0.2	FWS						No fish observed
1956								
Sept 12		FWS						8,000 pinks at mouth
Sept 15	0.3	FWS	1,250			75		2,500 pinks and 300 chums at mouth
Sept 29	0.5	FWS	5,000			4,200		100 pinks at mouth
1957								
Aug 14	G	FWS		8		30		
Aug 26	G	FWS						No fish observed
Sept 10	G 0.2	FWS		28		166		
1958								
Aug 26	A 0.5	FWS		50				
Sept 13	G 0.5	FWS				15		
1959								
Aug 17	A 0.5	FWS						No fish observed. Dark water
1960								
Oct 17	A length	ADF						No fish observed
1961								
Aug 20	A	ADF						5,000 in schools; good showing
Sept 9	A 1.0	ADF						1,200 mixed; 1,500 chums at mouth; many dead
1962								
Aug 10	A	ADF						600 at mouth; jumps in bay
Aug 29	A	ADF						7,000 at mouth; scattered jumps
1963								
Aug 19	A mouth	ADF						2,000 fish at mouth; stream brushy, overcast
Aug 28	A	ADF						3,500 salmon in intertidal; stream almost dry

56° 21.8' N. 134° 10.0' W:

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, THETIS BAY, Head.

MAJOR SPECIES Pink. OTHER SPECIES Chum.
ESCAPEMENT TIMING Late.
SPAWNING FACILITIES Good for length.
STREAM TEMPERATURES
VALLEY DESCRIPTION First half mile of this stream is a low, flat, and well-timbered valley.
DRAINAGE 4.1 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION Small flats.
ANCHORAGE Off flats.
TRAILS AND SURVEY ROUTES Wade stream.
AERIAL SURVEY NOTES Too brushy for surveys.

INTERTIDAL ZONE

LENGTH 0.05 mile. AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES Moderate.
BOTTOM Coarse gravel and boulders.
LOW TIDE LOCATION
HIGH TIDE LOCATION Timber.
SCHOOLING AREAS
SPAWNING AREAS Limited.
GENERAL NOTES Limited.

UPSTREAM

LENGTH ACCESSIBLE 0.7 mile. AVERAGE WIDTH/DEPTH 25"/12".
GRADIENT AND VELOCITIES Moderate.
BOTTOM Gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS Series of falls; appear to be complete barriers.
TRIBUTARIES None.
SCHOOLING AREAS Limited, probably mostly off mouth.
SPAWNING AREAS Good.
GENERAL NOTES Many windfalls are across the stream and thick brush covers the banks.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1943								
Sept 9	1.0	FWS	500		4,000			5,000 at mouth
1946								
Sept 20	1.0	FWS	8,000		80			Good seeding
1948								
Aug 30		FWS	35,000					
Oct 1		FWS	12,000					Few chum; good seeding
1951								
Aug 27	0.2	FWS	1		6			500 pinks at mouth; poor seeding
1953								
Sept 16	G 0.5	FWS			45			Many dead chums
1954								
Aug 28	A	FWS						Schooled pinks around estuary; stream low
Sept 1	A	FWS	500					Poor showing; few jumpers in bay
Sept 15	G	FWS	3,500		1,500			Chums excellent; expect good pinks
1955								
Aug 20	G 0.3	FWS						No fish observed
Oct 2	0.2	FWS	300	25				
1956								
Aug 26		FWS						20 pinks and 8 chums at mouth
Sept 5		FWS	2,500		500			3,400 pinks and 100 chums at mouth
Sept 12	1.0	FWS	2,000					3,000 pinks at mouth
Sept 15	0.2	FWS	530		20			2,000 pinks at mouth
Sept 25	1.0	FWS	7,000		3,000			
Sept 29	0.7	FWS	18,000		2,000			200 pinks and 25 chums at mouth
1957								
Aug 17	A 0.5	FWS						No fish observed
Aug 29	G 0.2	FWS						No fish observed
Sept 10	G 0.3	FWS	100		1,500			
1958								
Aug 26	A 1.0	FWS	200					Species not certain
Sept 13	G 0.2	FWS	20		110			50 pinks and 300 chums in tidal zone
1959								
Aug 28	A 0.5	FWS	150		25			Water clear and low
1960								
Oct 17	A length	ADF						No fish observed
1961								
Aug 20	A	ADF						3,000-5,000 at mouth; 500 in intertidal zone
Sept 9	A	ADF	1,500					2,000 in intertidal zone
Sept 15	G 0.1	ADF	1,000		200	415		

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1962								
July 31	A	ADF						No fish observed; no jumps in bay
Aug 10	A mouth	ADF						Few jumps in bay
Aug 29	A mouth	ADF						6,000 at mouth; no pinks observed in stream
1963								
Aug 19	A mouth	ADF						3,000 pinks at mouth; brushy
Aug 28	A	ADF						1,000 fish at mouth
Sept 4	G 0.1	ADF						780 mixed fish - walked to falls, nothing above; spawning activity good

56° 23.1' N. 134° 10.9' W.

ADF STAT. No.
E 46B

EASTERN, CHATHAM STRAIT, TEBENKOF BAY, THETIS BAY, W. shore.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho.
ESCAPEMENT TIMING Early-middle-late.
SPAWNING FACILITIES Good.
STREAM TEMPERATURES
VALLEY DESCRIPTION Low, wooded valley.
DRAINAGE 2 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION Salt chuck; falls at mouth.
ANCHORAGE Outside chuck or off #46.
TRAILS AND SURVEY ROUTES Log road up N. shore.
AERIAL SURVEY NOTES Too brushy to survey.

INTERTIDAL ZONE

LENGTH 0.2 mile. AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES Gradual.
BOTTOM Fine gravel and sand.
LOW TIDE LOCATION Salt chuck.
HIGH TIDE LOCATION Edge of brush.
SCHOOLING AREAS
SPAWNING AREAS The first quarter of a mile of the stream has good spawning area.
GENERAL NOTES Intertidal zone wanders through marshy area.

UPSTREAM

LENGTH ACCESSIBLE 0.5 mile. AVERAGE WIDTH/DEPTH 10'/12".
GRADIENT AND VELOCITIES Moderate.
BOTTOM Small gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES N. side of the stream is logged.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1943								
Sept 9	1.0	FWS			few			1,000 fish at mouth
1946								
Sept 29	1.0	FWS	10,000		500			Excellent seeding
1948								
Oct 1		FWS	15,000					Excellent seeding
1953								
Sept 16	G 0.2	FWS	9		255			Much of spawning rubble exposed
1954								
	No record							
1955								
July 13	G 0.2	FWS						No fish observed
Aug 20	G 0.2	FWS						No fish observed
1956								
Sept 12	0.2	FWS	50					5,000 pinks at mouth; poor showing
Sept 26	1.0	FWS	1,500					Fair showing
1957								
Aug 17	A 2.0	FWS						25 fish seen
Sept 10	G 1.0	FWS	8		142	900		
1958								
July 3	G 0.5	FWS						No fish observed
Sept 13	G 0.2	FWS			4			90 chums in tidal zone
1959								
Aug 17	A 0.5	FWS						No fish observed
Aug 26	A 0.5	FWS						No fish observed
1960								
Oct 17	A length	ADF						No fish observed; water dark
1961								
Sept 28	A	ADF						3,000 dead off mouth
1962								
July 28	A	ADF						No fish observed; low tide
1963								
Aug 19	A mouth	ADF						300 pinks at mouth; brushy
Sept 4	G mouth	ADF						Cohos jumping in chuck; pinks and chums in shallow of chuck

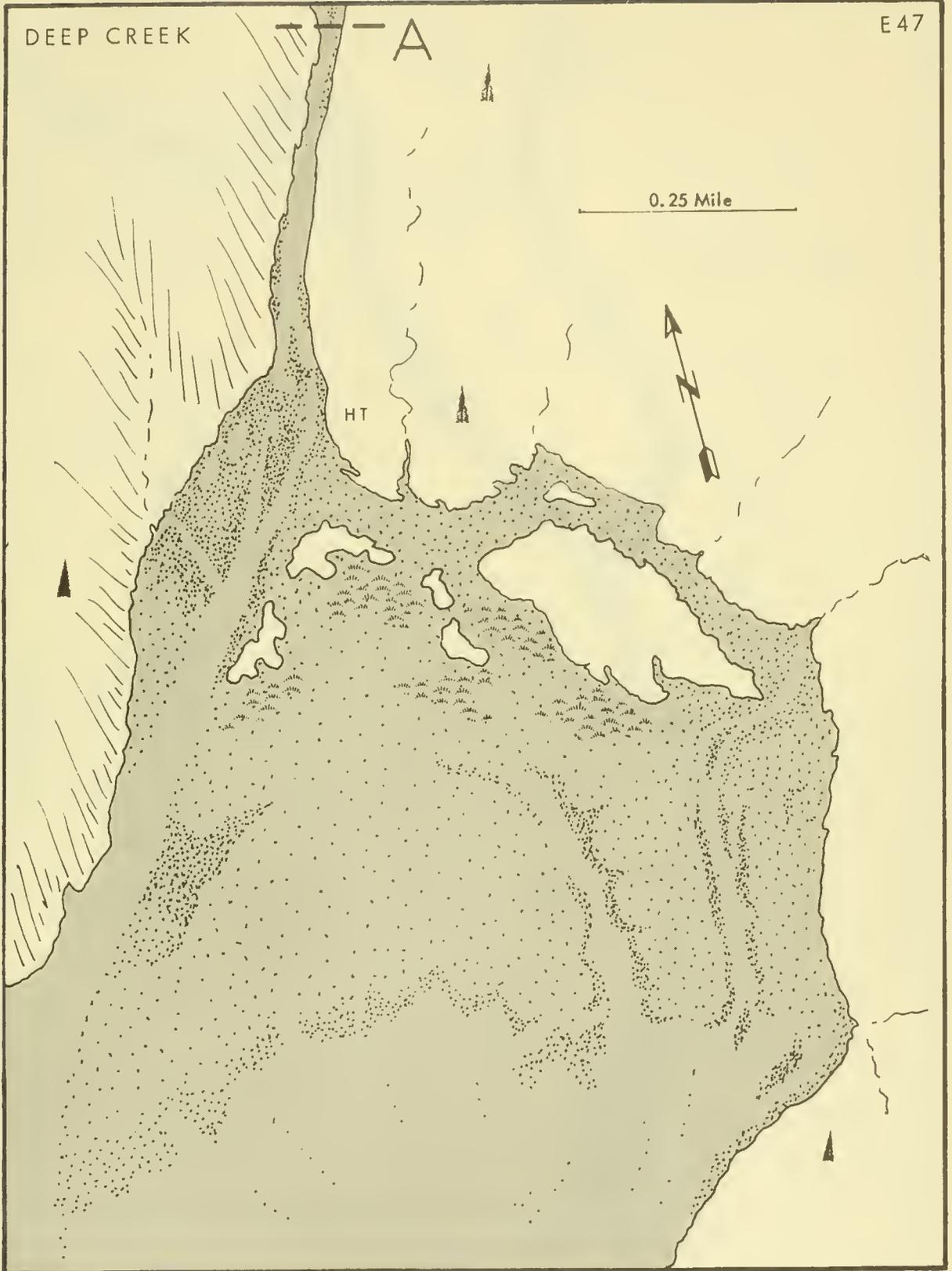
DEEP CREEK

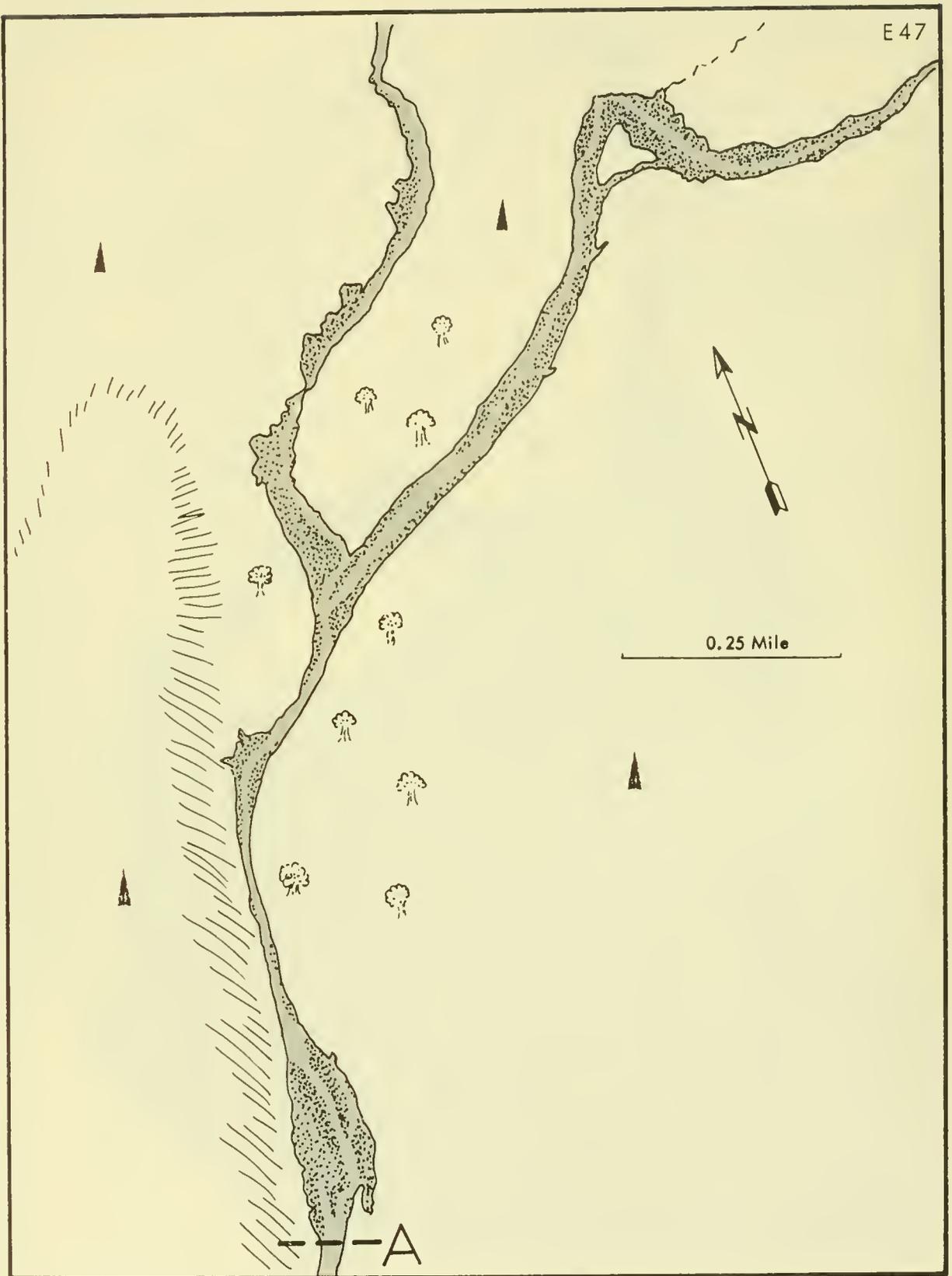
E 47

A

0.25 Mile

HT





S6°S2.1' N. 134°48.5' W.

DEEP CREEK

ADF STAT. No.

E 47

EASTERN, Chatham Strait, Red Bluff Bay, SW. head of bay.

MAJOR SPECIES Pink, chum.

OTHER SPECIES

ESCAPEMENT TIMING Early-middle.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES

VALLEY DESCRIPTION Glacial origin. Low wooded valley.

DRAINAGE 38.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Flats at head of bay.

ANCHORAGE Off old cannery inside entrance to bay.

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES Seldom able to survey due to severe downdrafts and turbulence in this area.

INTERTIDAL ZONE

LENGTH 0.2 mile.

AVERAGE WIDTH/DEPTH 100'

GRADIENT AND VELOCITIES Gradual.

BOTTOM Medium gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Several good pools.

SPAWNING AREAS Riffles throughout.

GENERAL NOTES This stream has a wide tideflat.

UPSTREAM

LENGTH ACCESSIBLE 3 miles.

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES Swift.

BOTTOM Boulders and coarse gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

DEEP CREEK

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1943								
Sept 19	0.9	FWS	1,000					2,000 pinks at mouth
1949								
Sept 12		FWS						Seeding excellent
1952								
Sept 17		FWS						Few spawners; no dead
1953								
July 4	G 1.0	FWS	10		100			Poor seeding
July 10	G 0.5	FWS	400		200			Poor seeding
July 23	A 1.0	FWS	150		200			Poor seeding
July 30	G 0.5	FWS	700		0			Poor seeding
Aug 5	G 0.5	FWS	500		6			Poor seeding
Aug 10	G 0.5	FWS	3,000		100			Poor seeding
Aug 18	G 0.5	FWS	300		0			Poor seeding
Aug 21	A 1.0	FWS	3,000		1,000			Poor seeding
Aug 21	G 0.5	FWS	150		3			Poor seeding
1954								
July 20	G	FWS						Little or no fish in bay; no rating
1955								
Sept 7	G 0.5	FWS	6,000					Fair seeding
1956								
July 25		FWS			2			150 chums at mouth
July 29	1.0	FWS	16		20			150 pinks at mouth
July 31	1.0	FWS						500 pinks at mouth
Aug 6		FWS	800		200			
Aug 13		FWS	750		150			115 pinks at mouth
Sept 1	2.0	FWS						4,000 pinks at mouth
Sept 3	1.0	FWS	1,923		288			
Sept 12	2.0	FWS						8,000 pinks at mouth
1957								
July 15	G 0.2	FWS						5 dead
July 30	G bay	FWS						200 pinks off mouth
Aug 8	G	FWS	200					
Aug 11	G	FWS	11					
Aug 19	G 0.2	FWS						400 mixed fish
Aug 20	A length	FWS						400 fish
Oct 8	2.0	FWS	1,000		4,000			
1958								
July 22	G 0.2	FWS			8			No fish at mouth
July 24	G 0.2	FWS			20			150 pinks in upper tidal zone
Aug 30	G 1.0	FWS	750		150			100 pinks and 4 chums off creek
1959								
July 27	A 0.5	FWS			25			Low tide; water clear
1960								
		No record						
1961								
		No record						
1962								
		No record						

DEEP CREEK

ADF STAT. No.

E 47

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1963								
July 23	G 0.7	ADF	2,200		few			Fish in first 4 holes above intertidal zone
Aug 12	G 2.0	ADF	10,000		few			Ideal conditions

56° 49.7' N. 134° 41.7' W.

ADF STAT. No.
E 47A

EASTERN, FREDERICK SOUND, RED BLUFF BAY, outside of bay, S.

MAJOR SPECIES Red. OTHER SPECIES
ESCAPEMENT TIMING Early.
SPAWNING FACILITIES Good above lake.
STREAM TEMPERATURES
VALLEY DESCRIPTION Small box canyon around lake.
DRAINAGE 6.8 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION Falls at tidewater.
ANCHORAGE Advise anchorage in Red Bluff Bay.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Milky white stream makes it impossible to see fish. Caution due to
downdrafts. Can land on lake for foot surveys.

INTERTIDAL ZONE

LENGTH None. AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES Falls at tidewater.

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 120'/20".
GRADIENT AND VELOCITIES Moderate.
BOTTOM Gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS Off mouth at base of falls.
SPAWNING AREAS Fair.
GENERAL NOTES Short outlet between salt water and lake. Good red lake.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1943								
Sept 19 1949	1.0	FWS						Seeding fair
Sept 12 1952		FWS						Seeding excellent
Aug 12	1.5	FWS						2,000 salmon in stream - mostly pink. Poor seeding
1954								
Sept 9 1955	5.0	FWS			1,000			No dead
		No record						
1956								
Sept 9	2.0	FWS	5		46			1,500 pinks and 1,500 chums at mouth
1957								
June 22-24	G	FWS						Few salmon at mouth
June 27	G	FWS						200 reds at mouth
July 10	G falls	FWS					78 reds	
Aug 4	G falls	FWS	75					
Aug 8	G falls	FWS	100					
1958								
July 13-18	G	FWS						8 dead red
July 19-23	G	FWS						4 to 100 reds seen daily
July 31	G to falls	FWS					18 reds	
Aug 1	G 0.1	FWS					100 reds	
Aug 5	G	FWS					100 reds	
Aug 9	G	FWS					18 reds	
Aug 15	G	FWS					50 reds	
Aug 30	G to lake	FWS						No fish observed
1959								
July 1	G to lake	FWS					25 reds	
July 2	G to lake	FWS					30 reds	
July 6	G to lake	FWS					40 reds	
July 7	G to lake	FWS					12 reds	
July 10	G to lake	FWS					25 reds	
July 20	G to lake	FWS					1,000 reds	
July 22	G to lake	FWS					800 reds	
July 25	G to lake	FWS					1,000 reds	
July 31	G to lake	FWS						800 pinks and 500 reds at mouth
Aug 3	G to lake	FWS					125 reds	
Aug 4	G to lake	FWS					115 reds	
Aug 17	A to lake	FWS						100 salmon at mouth
1960		No record						
1961		No record						
1962		No record						

56° 42.2' N. 134° 44.7' W.

ADF STAT. No.

E 48

EASTERN, CHATHAM STRAIT, GUT BAY, SW. end.

MAJOR SPECIES Red. OTHER SPECIES Coho.
ESCAPEMENT TIMING Early-middle-late.
SPAWNING FACILITIES Poor.
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 6.5 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES Stream very difficult to walk; deep, brushy banks.
AERIAL SURVEY NOTES Too brushy to survey.

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.5 mile to lake. AVERAGE WIDTH/DEPTH 40'/12"
GRADIENT AND VELOCITIES Swift.
BOTTOM Large granite boulders.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS Poor.
GENERAL NOTES This stream has little or no spawning area for pink salmon. Primarily a red salmon stream.

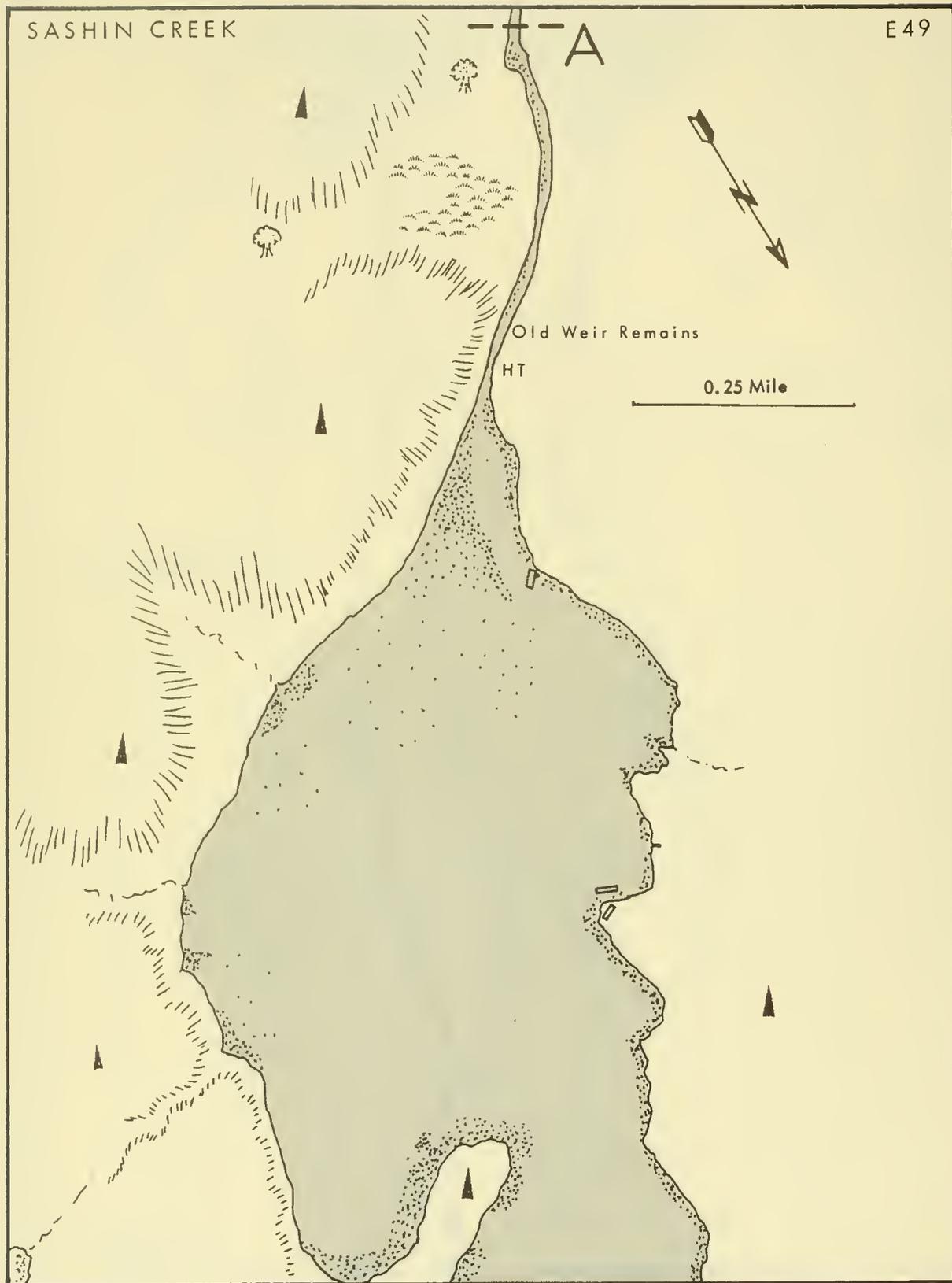
ESCAPEMENT RECORD

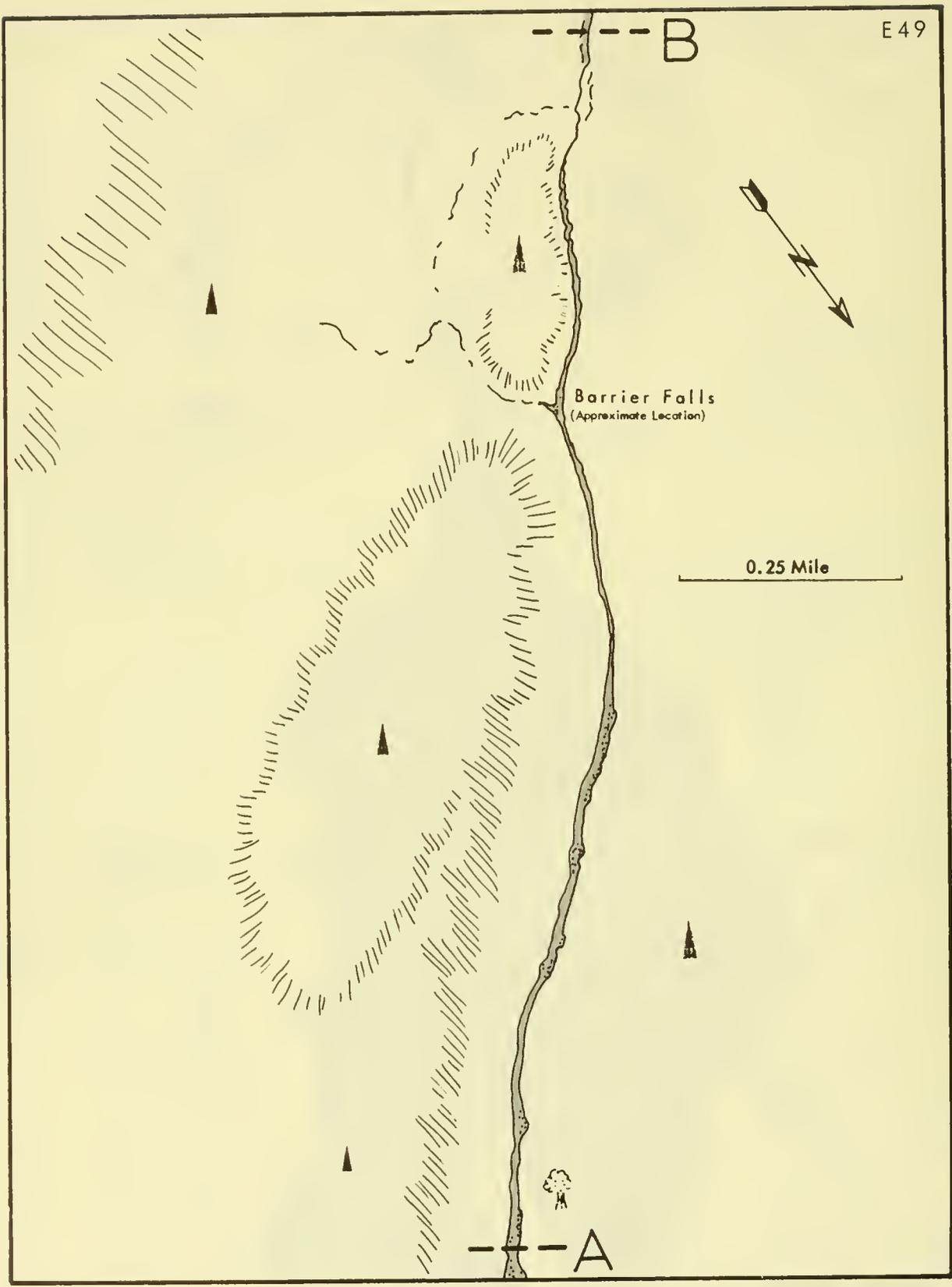
[Counts made by ground surveys are designated by G; aerial surveys by A]

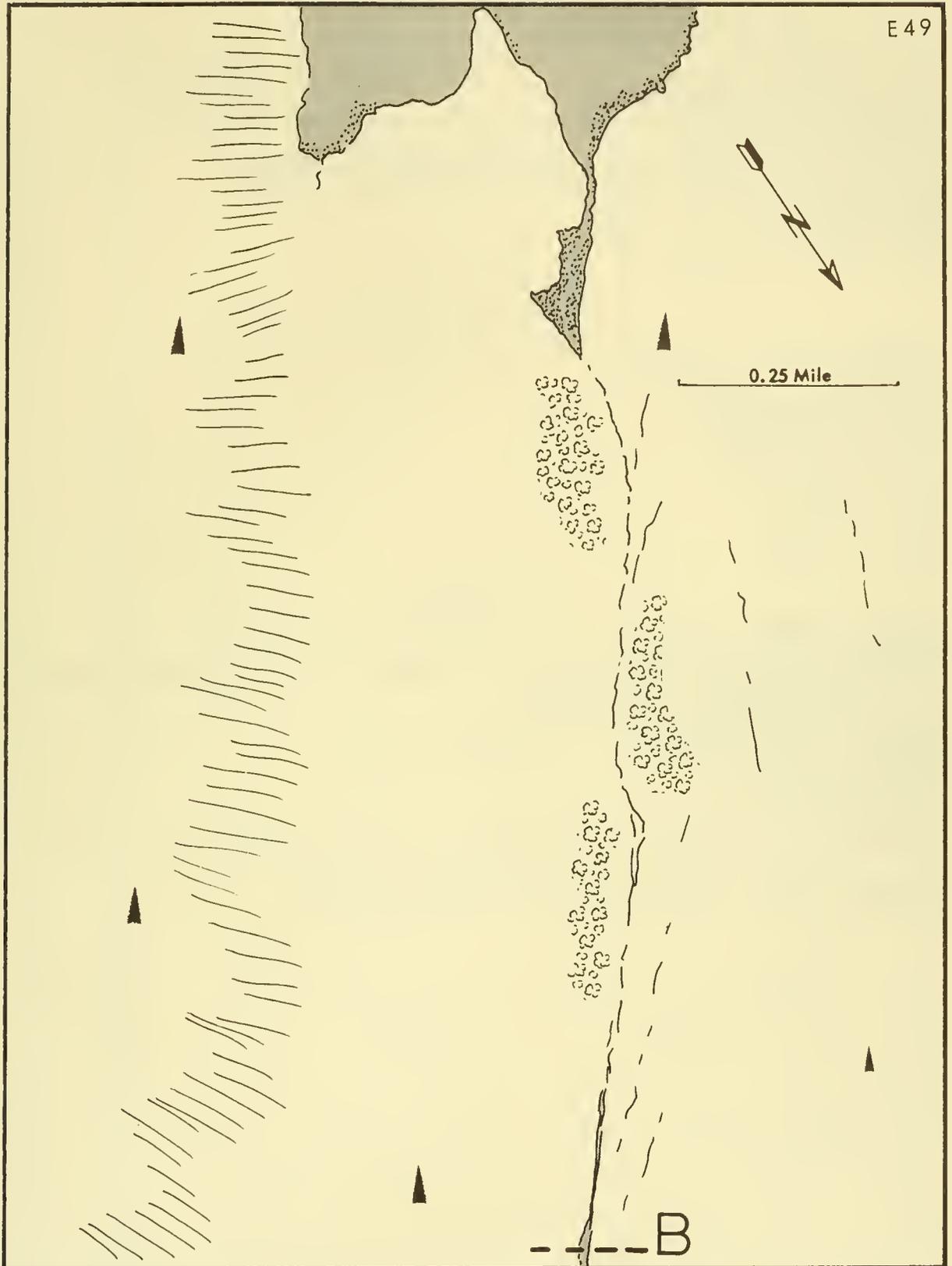
Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1943								
Sept 20 1949	0.7	FWS						1,000 pinks at mouth
Sept 12 1952		FWS						Seeding excellent
Aug 14	A 1.5	FWS						150 pinks at mouth; poor seeding
Sept 17 1953		FWS						No fish at mouth
Season		FWS						Examiner concluded good escapement of red and coho but poor for pink and chum
1954								
June 21	G	FWS					50 reds	
June 26	G 0.5	FWS					100 reds	
July 1	G	FWS					16 reds	
July 5	G 0.5	FWS					30 reds, 20 cohos	
July 11	G	FWS					300 reds, 25 cohos	
July 12	G 0.5	FWS					11 reds	
July 16	G	FWS	200				12 reds	First showing of pinks behind markers
July 19	G 0.5	FWS	250				250 reds, 100 cohos	
July 20	G	FWS					5,000 reds	1,000 reds in bay
July 25	G 0.5	FWS	200		12		500 reds, 1,500 cohos	
1955								
Season		FWS	500					
1956								
July 2	G 0.2	FWS						500 pinks at mouth
July 4	G 0.5	FWS					8 reds	300 pinks at mouth
July 9	G 0.5	FWS					3 reds	50 pinks at mouth
July 15	A	FWS					500 reds	
July 16	G 1.0	FWS						20 pinks at mouth
July 22	G 1.0	FWS					4 reds	5 pinks at mouth
July 30	G 0.2	FWS					50 reds	2,500-3,000 pinks at mouth
July 31		FWS					3,000 reds	
Aug 10		FWS						3 chums at mouth
Sept 3	1.0	FWS	2			5		1 pink at mouth
Sept 6		FWS						25 pinks at mouth
Sept 10	0.7	FWS	71					90 pinks at mouth
Sept 28	0.2	FWS	7					
1957								
June 25-								
July 5	G 0.5	FWS						150 fish at mouth
July 12	G lake	FWS						No fish in stream; 25 in mouth
Sept 30	G 0.2	FWS					10 cohos	No jumping in bay

ESCAPEMENT RECORD - Continued

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1958								
July 7	G 0.1	FWS					200 redds	
July 23	G 0.1	FWS					200 redds	
July 24	G 0.1	FWS					600 redds	
Aug 1	G 0.1	FWS					500 redds	
Aug 4	G 0.1	FWS					300 redds	
Aug 8	G 0.1	FWS					600 redds	
Aug 10	G 0.1	FWS					200 redds	
Aug 30	G 0.2	FWS	200		50			75 redds and 50 pinks in tidal zone
1959								
Aug 17	bay	FWS						25,000 salmon in bay
1960								
	No record							
1961								
	No record							
1962								
	No record							
1963								
Aug 11	G 0.7	ADF	25					250 redds in lake; 6,000 at mouth







EASTERN, CHATHAM STRAIT, LITTLE PORT WALTER, Head.

MAJOR SPECIES 87% pink. OTHER SPECIES Chum, coho, red.
 ESCAPEMENT TIMING Middle-late.
 SPAWNING FACILITIES There are about 1,500 yards of the stream available to fish.
 STREAM TEMPERATURES
 VALLEY DESCRIPTION Stream runs low between parallel mountain ranges.
 DRAINAGE 3.3 square miles (polar planimeter). Stream drains a large lake.
 ANCHORAGE
 TRAILS AND SURVEY ROUTES
 AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
 GRADIENT AND VELOCITIES
 BOTTOM
 LOW TIDE LOCATION
 HIGH TIDE LOCATION
 SCHOOLING AREAS
 SPAWNING AREAS
 GENERAL NOTES

UPSTREAM

LENGTH 0.7 mile. AVERAGE WIDTH/DEPTH 60'/12".
 GRADIENT AND VELOCITIES
 BOTTOM Pinks chose small to grapefruit-sized gravel or rubble; chums and cohos chose football-sized material with smaller particles mixed in.
 MARKER DISTANCE
 MARKER IDENTIFICATION
 BARRIERS A falls blocks further ascent of fish 0.7 mile upstream.
 TRIBUTARIES
 SCHOOLING AREAS
 SPAWNING AREAS Only about 1,500 yards of stream are available to fish because of high falls.
 GENERAL NOTES A large survey activity is maintained at this stream.

SASHIN CREEK

U. S. Fish & Wildlife Service Weir Counts

Date	Pink	Chum	Coho	Red	King	Remarks
1934						
Aug 18	310					
Aug 19	278					
Aug 20	10					
Aug 21	0					
Aug 22	51					
Aug 23	9					
Aug 24	41					
Aug 25	30					
Aug 26	62					
Aug 27	9					
Aug 28	196					
Aug 29	41					
Aug 30	0					
Aug 31	890	1				
Sept 1	100	1				
Sept 2	52	0				
Sept 3	28	0				
Sept 4	86	0				
Sept 5	6	0				
Sept 6	1,206	3				
Sept 7	178	2				
Sept 8	48	1				
Sept 9	5	0				
Sept 10	32	1				
Sept 11	205	0				
Sept 12	14	1				
Sept 13	235	0				
Sept 14	2,736	5				
Sept 15	12	0	1			
Sept 16	0					
Sept 17	82					
Totals	6,952	15	1			
1935						
Aug 12	2					
Aug 13-16	0					
Aug 17	73					
Aug 18	3					
Aug 19	28					
Aug 20	117					
Aug 21	574					
Aug 22	700					
Aug 23	130					
Aug 24	905					
Aug 25	265					
Aug 26	100					
Aug 27	36					
Aug 28	69					
Aug 29	39					
Aug 30	44					
Aug 31	11					
Sept 1	67					
Sept 2	47					
Sept 3	12					
Sept 4	81					
Sept 5	20					
Sept 6	68					
Sept 7	214					
Sept 8	77					

ADF STAT. No.
E 49

SASHIN CREEK - Continued

Date	Pink	Chum	Coho	Red	King	Remarks
1935						
Sept 9	102					
Sept 10	264					
Sept 11	128					
Sept 12	543					
Sept 13	450					
Sept 14	477					
Sept 15	66					
Sept 16	19					
Sept 17	4					
Sept 18	287					
Sept 19	7					
Sept 20	9					
Sept 21	5					
Total	6,073					
1936						
Totals	5,164	55	14			
1937						
Aug 15	0					
Aug 16	25	1				
Aug 17	100	4				
Aug 18	23					
Aug 19	0					
Aug 20	122	3	1			
Aug 21	1,006	15	2			
Aug 22	1,029	7		1		
Aug 23	156					
Aug 24	134					
Aug 25	857	3				
Aug 26	342	2				
Aug 27	123	3				
Aug 28	0					
Aug 29	76					
Aug 30	89					
Aug 31	157	1				
Sept 1	280					
Sept 2	191	2				
Sept 3	189	2				
Sept 4	0					
Sept 5	195	1				
Sept 6	461	3		2		
Sept 7	653	1				
Sept 8	806	5	4			
Sept 9	71		1			
Sept 10	Weir washed out					
Totals	7,085	53	8	3		
1938						
Aug 29	119					
Aug 30	322					
Aug 31	227					
Sept 1	276					
Sept 2	160					
Sept 3	63					
Sept 4	39					
Sept 5	71					
Sept 6	9					
Sept 7	204					
Sept 8	16					
Sept 9	800	2				

SASHIN CREEK - Continued

Date	Pink	Chum	Coho	Red	King	Remarks
1938						
Sept 10	2,484	1	1			
Sept 18	14					
Sept 19	20					
Sept 20	67					
Sept 21	48					
Sept 22	3					
Totals	6,467	5	1			
1939						
Aug 17	9					
Aug 18	0					
Aug 19	0					
Aug 20	0					
Aug 21	361					
Aug 22	240					
Aug 23	223					
Aug 24	311	2				
Aug 25	424	5	9	1		
Aug 26	179	3	7			
Aug 27	259					
Aug 28	1,011					
Aug 29	656		2	1		
Aug 30	860		1	2		
Aug 31	511					
Sept 1	952					
Sept 2	1,082	4	5			
Sept 3	578	3	11	2		
Sept 4	581	3	1			
Sept 5	566	2	7	1		
Sept 6	0					
Sept 7	4,515	32	49			
Sept 8	520	3	7			
Sept 9	0					
Sept 10	0					
Sept 11	1,366	3	11			
Sept 12	466	1	4			
Sept 13	0					
Sept 14	427					
Sept 15	11					
Sept 16-20	0					
Sept 21	249	23	5			
Sept 22	0					
Sept 23	308	17	3			
Sept 24-25	0					
Sept 26	166	16				
Totals	16,830	117	122	7		
1940						
Aug 20	6					
Aug 21-22	0					
Aug 23	410					
Aug 24	0					
Aug 25	2,856					
Aug 26	3,000					
Aug 27-28	0					
Aug 29	800					
Aug 30	1,000					
Aug 31	2,500					
Sept 1	1,600					
Sept 2	0					

SASHIN CREEK - Continued

ADF STAT. No. E 49

Date	Pink	Chum	Coho	Red	King	Remarks
1940						
Sept 3	2,904					
Sept 4	4,700					
Sept 5	5,336					
Sept 6	4,000					
Sept 7	1,300					
Sept 8	0					
Sept 9	330					
Sept 10	660					
Sept 11	1,000					
Sept 12	0					
Total	47,594	131	1			
1941						
Aug 16	160					
Aug 17	106					
Aug 18	353					
Aug 19	528					
Aug 20	840					
Aug 21	2,313					
Aug 22	3,781					
Aug 23	4,870					
Aug 24	4,286					
Aug 25	8,265					
Aug 26	1,310					
Aug 27	290					
Aug 28	32					
Aug 29	61					
Aug 30	1,064					
Aug 31	201					
Sept 1	479					
Sept 2	323					
Sept 3	151					
Sept 4	3					
Sept 5	148					
Sept 6	280					
Sept 7	92					
Sept 8	1,535					
Sept 9	421					
Sept 10	37					
Sept 11	115					
Sept 12	155					
Sept 13	963					
Sept 14	95					
Sept 15	779					
Sept 16	4,050					
Sept 17	4,124					
Sept 18	6,254					
Sept 19	3,783					
Sept 20	88					
Sept 21	1,239					
Sept 22	16,397					
Sept 23	6,019					
Total	76,104					
1942						
Aug 17	5					
Aug 18	77					
Aug 19	21					
Aug 20	13					
Aug 21	0					
Aug 22	348					

SASHIN CREEK - Continued

ADF STAT. No.
E 49

Date	Pink	Chum	Coho	Red	King	Remarks
1942						
Aug 23	70					
Aug 24	1,403					
Aug 25	511					
Aug 26	184					
Aug 27	1,865					
Aug 28	898					
Aug 29	48					
Aug 30	1,739					
Aug 31	481					
Sept 1	726					
Sept 2	1,348					
Sept 3	1,315					
Sept 4	643					
Sept 5	381					
Sept 6	125					
Sept 7	4,649					
Sept 8	4,074					
Sept 9	2,975					
Sept 10	651					
Sept 11	13,174					
Sept 12	9,072	1				
Sept 13	3,620	1				
Sept 14	5,605					
Sept 15	3,088					
Sept 16	1,091	1				
Sept 17	625					
Sept 18-19	0					
Sept 20	252					
Sept 21	7,848					
Sept 22	9,436	2	2			
Sept 23	7,365	2				
Sept 24	2,740					
Sept 25	626					
Sept 26	58					
Totals	88,846	7	2			
1943						
Aug 21	25		2			
Aug 22	111					
Aug 23	246	1				
Aug 24	363	4	2	1		
Aug 25	286	3				
Aug 26-27	0					
Aug 28	279		1			
Aug 29	1,205	5				
Aug 30	284	1				
Aug 31	1,107	6				
Sept 1	32	1				
Sept 2	98					
Sept 3	1,939	9				
Sept 4	0					
Sept 5	36	4				
Sept 6	5					
Sept 7	6					
Sept 8	474	5				
Sept 9	341	2				
Sept 10	29					
Sept 11	1,573	12	2			
Sept 12	1,829	27	1			
Sept 13	405	9				

Date	Pink	Chum	Coho	Red	King	Remarks
1943						
Sept 14	139	2				
Sept 15	222	5				
Sept 16	349	1				
Sept 17	131	1				
Sept 18	270	1				
Sept 19	1,467	34	4			
Sept 20	602	4	1			
Sept 21	1					
Sept 22	248	3				
Sept 23	500	4	3			
Sept 24	37					
Sept 25	2					
Sept 26	16					
Sept 27	71	5	4			
Sept 28	29	2	2			
Sept 29	7	1				
Sept 30	17	1	2			
Oct 1	0		4			
Oct 2	2					
Totals	14,783	153	28	1		
1944						
Aug 25	1	9				
Aug 26	55	71	2			
Aug 27	126	44	1			
Aug 28	17	5	3			
Aug 29	100	32		1		
Aug 30	28	3				
Aug 31	26	1				
Sept 1	173	52				
Sept 2	195	44				
Sept 3	116	11				
Sept 4	259	20				
Sept 5	148	9		2		
Sept 6	197	16				
Sept 7	174	4				
Sept 8	113					
Sept 9	101					
Sept 10	285	10		1		
Sept 11	130	2				
Sept 12	432	61				
Sept 13	612	54				
Sept 14	271	24				
Sept 15	164	27		1		
Sept 16	68	17				
Sept 17	42	8				
Sept 18	3					
Sept 19	14	13				
Sept 20	18	3				
Sept 21	106	21	3	1		
Sept 22	52	8	5	2		
Sept 23	8		2			
Sept 24	0					
Sept 25	2					
Sept 26	0					
Sept 27	3	2				
Sept 28	0					
Sept 29	0	7				
Sept 30	5	2	3			
Oct 1	1	2	14			

SASHIN CREEK - Continued

Date	Pink	Chum	Coho	Red	King	Remarks
1944						
Oct 2	3		179	1		
Oct 3-4	0					
Oct 5	2	2	28			
Oct 6			9			
Oct 7			7			
Oct 8			9			
Oct 9			30			
Oct 10			1			
Oct 11			6			
Oct 12			0			
Oct 13			19			
Oct 14		1				
Oct 15-16	0					
Oct 17			3			
Oct 18			1			
Totals	4,050	585	325	9		
1945						
Aug 22	0					
Aug 23	2					
Aug 24	1					
Aug 25	0					
Aug 26	0					
Aug 27	0					
Aug 28	1					
Aug 29	0					
Aug 30	2					
Aug 31	0					
Sept 1	8					
Sept 2	0					
Sept 3	20					
Sept 4	81					
Sept 5	127					
Sept 6	685					
Sept 7	328					
Sept 8	151					
Sept 9	275					
Sept 10	494					
Sept 11	294					
Sept 12	233					
Sept 13	145					
Sept 14	214					
Sept 15	181					
Sept 16	72					
Sept 17	18					
Sept 18	600					
Sept 19	277					
Sept 20	110					
Sept 21	50					
Sept 22	21					
Sept 23	54					
Sept 24	280					
Sept 25	103					
Sept 26	75					
Sept 27	291					
Sept 28	113					
Sept 29	91					
Sept 30	9					
Oct 1	15					
Oct 2	6					

SASHIN CREEK - Continued

ADF STAT. No.

E 49

Date	Pink	Chum	Coho	Red	King	Remarks
1945						
Oct 3	4					
Oct 4	9					
Oct 5	6					
Oct 6	3					
Oct 7	0					
Oct 8	2					
Oct 9	1					
Oct 10	1					
Oct 11	4					
Totals	5,457	123	588			
1946						
Sept 9	9					
Sept 10	54					
Sept 11	21					
Sept 12	159					
Sept 13	130					
Sept 14	74					
Sept 15	153					
Sept 16	107					
Sept 17	115					
Sept 18	15					
Sept 19	31					
Sept 20	7					
Sept 21	2					
Sept 22	35					
Sept 23	1					
Sept 24	5					
Sept 25	3					
Sept 26	-					
Sept 27	3					
Sept 28	3					
Sept 29	1					
Sept 30	-					
Oct 1-4	-					
Oct 5	3					
Oct 6	1					
Oct 7-9	-					
Oct 10	1					
Totals	933	5	286	2		
1947						
Aug 25	4					
Aug 26			1			
Aug 27	6		1			
Aug 28	-					
Aug 29	14	3	2			
Aug 30	6	2	3			
Aug 31	25	4	5			
Sept 1	28	2	2	1		
Sept 2	18	5				
Sept 3	15	2		1		
Sept 4	5	2				
Sept 5	7	2	1			
Sept 6	19					
Sept 7	58					
Sept 8	52	4	2			
Sept 9	123	1	3			
Sept 10	119	2				
Sept 11	118	2	3			

SASHIN CREEK - Continued

ADF STAT. No. E 49

Date	Pink	Chum	Coho	Red	King	Remarks
1947						
Sept 12	57	7	2			
Sept 13	54	6	2			
Sept 14	74	7	5			
Sept 15	47	15	1			
Sept 16	26	9	1			
Sept 17	59	4	1			
Sept 18	34	5	1			
Sept 19	140	2	7	1		
Sept 20	71	3	2			
Sept 21	79	2	3			
Sept 22	48	3	15			
Sept 23	33					
Sept 24	17	2				
Sept 25	12	3				
Sept 26	20	3	1			
Sept 27	4					
Sept 28	7					
Sept 29	39	8	40			
Sept 30	31	6	51			
Oct 1	7	5	3			
Oct 2	5	5	1			
Oct 3	4	11	1			
Oct 4	0	2	2			
Oct 5		3	1			
Oct 6	-					
Oct 7	Weir removed					
Totals	1,486	142	163	3		
1948						
Aug 31	9					
Sept 1	9					
Sept 2	3					
Sept 3	22					
Sept 4	29					
Sept 5	9					
Sept 6	18					
Sept 7	15					
Sept 8	18					
Sept 9	45					
Sept 10	72					
Sept 11	41					
Sept 12	33					
Sept 13	19					
Sept 14	25					
Sept 15	18					
Sept 16	22					
Sept 17	57					
Sept 18	43					
Sept 19	8					
Sept 20	19					
Sept 21	24					
Sept 22	15					
Sept 23	3					
Sept 24	3					
Sept 25	1					
Sept 26	5					
Sept 27	5					
Sept 28	1					
Sept 29	1					

SASHIN CREEK - Continued

ADF STAT. No. E 49

Date	Pink	Chum	Coho	Red	King	Remarks
1948						
Sept 30	-					
Oct 1	-					
Oct 2	1					
Oct 3	1					
Oct 4-5	-					
Oct 6	2					
Oct 7	-					
Oct 8	1					
Total	597					
1949						
Aug 26	4					
Aug 27	4					
Aug 28	6					
Aug 29	35					
Aug 30	68					
Aug 31	58					
Sept 1	209					
Sept 2	154					
Sept 3	176					
Sept 4	169					
Sept 5	170					
Sept 6	184					
Sept 7	243					
Sept 8	234					
Sept 9	143					
Sept 10	163					
Sept 11	164					
Sept 12	309					
Sept 13	344					
Sept 14	493					
Sept 15	492					
Sept 16	288					
Sept 17	143					
Sept 18	81					
Sept 19	117					
Sept 20	66					
Sept 21	59					
Sept 22	82					
Sept 23	52					
Sept 24	103					
Sept 25	27					
Sept 26	38					
Sept 27	13					
Sept 28	4					
Sept 29	3					
Sept 30	4					
Total	4,902					
1950						
Aug 25	1	1	2			
Aug 26	-					
Aug 27	1	9	12			
Aug 28	2	3	5			
Aug 29	2	-	1			
Aug 30	-	-	-			
Aug 31	-	1	-			
Sept 1	4	2	1			
Sept 2	1	-	1			
Sept 3	-	1	2			

SASHIN CREEK - Continued

ADF STAT. No. E 49

Date	Pink	Chum	Coho	Red	King	Remarks
1950						
Sept 4	2	2	1			
Sept 5	1	1	1			
Sept 6	-	2	-			
Sept 7	-	-	-			
Sept 8	9	-	-			
Sept 9	-	-	-			
Sept 10	3	1	-			
Sept 11	11	3	-			
Sept 12	-	-	-			
Sept 13	2	-	-			
Sept 14	6	2	-			
Sept 15	3	-	-			
Sept 16	-	-	-			
Sept 17	2	-	-			
Sept 18	24	9	2			
Sept 19	23	6	25			
Sept 20	5	1	5			
Sept 21	2	2	1			
Sept 22	-	4	3			
Sept 23	2	4	1			
Sept 24	1	4	-			
Sept 25	-	2	-			
Sept 26	2	4	-			
Sept 27	2	1	-			
Sept 28	1	-	2			
Sept 29	-	-	1			
Totals	112	65	66			
1951						
Aug 13	8					
Aug 14	22		1			
Aug 15	41	1				
Aug 16	37	2	4			
Aug 17	60		6			
Aug 18	68	1				
Aug 19	40		2			
Aug 20	7	2	1			
Aug 21	8	2	4			
Aug 22	10	1	3			
Aug 23	6					
Aug 24	7					
Aug 25	16		1			
Aug 26	19					
Aug 27	25					
Aug 28	26					
Aug 29	53					
Aug 30	35					
Aug 31	99	4				
Sept 1	131	7				
Sept 2	248	3				
Sept 3	131	6				
Sept 4	354	3				
Sept 5	273	8				
Sept 6	360	21				
Sept 7	493	53	10			
Sept 8	216	12	16			
Sept 9	217	20	18			
Sept 10	193	16	6			
Sept 11	178	9				
Sept 12	95	5	1			

SASHIN CREEK - Continued

Date	Pink	Chum	Coho	Red	King	Remarks
1951						
Sept 13	89	8	2			
Sept 14	92	10	-			
Sept 15	53	8	1			
Sept 16	42	3	1			
Sept 17	108	7	-			
Sept 18	74	4	3			
Sept 19	28	1	-			
Sept 20	9	-	-			
Sept 21	11	2	-			
Sept 22	46	1	2			
Sept 23	38	6	-			
Sept 24	32	6	-			
Sept 25	7	-	-			
Sept 26	-	-	-			
Sept 27	9	1	-			
Sept 28	155	13	12			
Sept 29	43	9	11			
Sept 30	21	3	9			
Oct 1	12	-	2			
Oct 2	17	2	17			
Oct 3	1	-	-			
Oct 4	3	1	2			
Oct 5	-					
Total	4,366	261	135			
1952						
Aug 17		3	3			
Aug 18			7			
Aug 19		1	3			
Aug 20		1	6			
Aug 21		2	1			
Aug 22		4				
Aug 23	-					
Aug 24		3				
Aug 25		3				
Aug 26-27	-					
Aug 28		3				
Aug 29			1			
Aug 30		1	1			
Aug 31		1	2			
Sept 1		3				
Sept 2		6				
Sept 3		1				
Sept 4		3				
Sept 5		4				
Sept 6		8	7			
Sept 7		7	1			
Sept 8	2	1	12			
Sept 9	-					
Sept 10		1				
Sept 11		3				
Sept 12	-					
Sept 13	6	3	45			
Sept 14	2		13			
Sept 15	8	3	1			
Sept 16	16	3	27			
Sept 17	1		2			
Sept 18		1	2			
Sept 19	5		2			

Date	Pink	Chum	Coho	Red	King	Remarks
1952						
Sept 20	2					
Sept 21	-					
Sept 22	-		3			
Sept 23	-					
Sept 24	-		8			
Sept 25	2		5			
Sept 26	-					
Sept 27			4			
Sept 28	-					
Sept 29		1	1			
Sept 30			1			
Oct 1			17			
Oct 2	1					
Oct 3-4	-					
Oct 5			1			
Oct 6-8	-					
Oct 9			6			
Totals	45	70	182			
1953						
Aug 10	2					
Aug 11	-					
Aug 12	4					
Aug 13	18					
Aug 14	57	3	4			
Aug 15	7	2				
Aug 16	27	3				
Aug 17	18					
Aug 18	8					
Aug 19	2	1				
Aug 20	1					
Aug 21	2	2				
Aug 22	1	1				
Aug 23	18	5				
Aug 24	51	8	3			
Aug 25	8	3				
Aug 26	2					
Aug 27	16					
Aug 28	23	1				
Aug 29	191	14	2			
Aug 30	136	4				
Aug 31	76					
Sept 1	6					
Sept 2	36					
Sept 3	39					
Sept 4	33					
Sept 5	105	9	1			
Sept 6	62	4				
Sept 7	99	23	16			
Sept 8	55	2	25			
Sept 9	15	7				
Sept 10	11	5				
Sept 11		7	21			
Sept 12		10	2			
Sept 13		3				
Sept 14	27	7	1			
Sept 15	2	3				
Sept 16	2	2	1			
Sept 17	1	6				

SASHIN CREEK - Continued

Date	Pink	Chum	Coho	Red	King	Remarks
1953						
Sept 18		2	1			
Sept 19		-				
Sept 20	2	1	1			
Sept 21			2			
Sept 22		1				
Sept 23		-				
Sept 24		2				
Sept 25		-				
Sept 26		2	33			
Sept 27			2			
Sept 28-30		-				
Oct 1	1		1			
Totals	1,164	143	116			
1954						
Sept 6		9	2			
Sept 7		4	21			
Sept 8			18			
Sept 9						
Sept 10		2	5			
Sept 11		1				
Sept 12		-				
Sept 13		5	14			
Sept 14	3	1	2			
Sept 15		-				
Sept 16-20		-				
Sept 21	4	2	55			
Sept 22	5	1	8			
Sept 23			8			
Sept 24			10			
Sept 25	1		11			
Sept 26-						
Oct 5			-			
Oct 6	Weir pulled					
Totals	13	25	154			
1955						
Aug 5	2					
Aug 6			1			
Aug 7	27		1			
Aug 8	41		1			
Aug 9	12					
Aug 10	11					
Aug 11	3		1			
Aug 12	22					
Aug 13	31					
Aug 14	13					
Aug 15	5		1			
Aug 16	46		4			
Aug 17	28					
Aug 18	23					
Aug 19	8					
Aug 20	47					
Aug 21	15					
Aug 22	67					
Aug 23	31					
Aug 24	40					
Aug 25	61					
Aug 26	66		1			
Aug 27	2					
Aug 28	65					

SASHIN CREEK - Continued

ADF STAT. No.

E 49

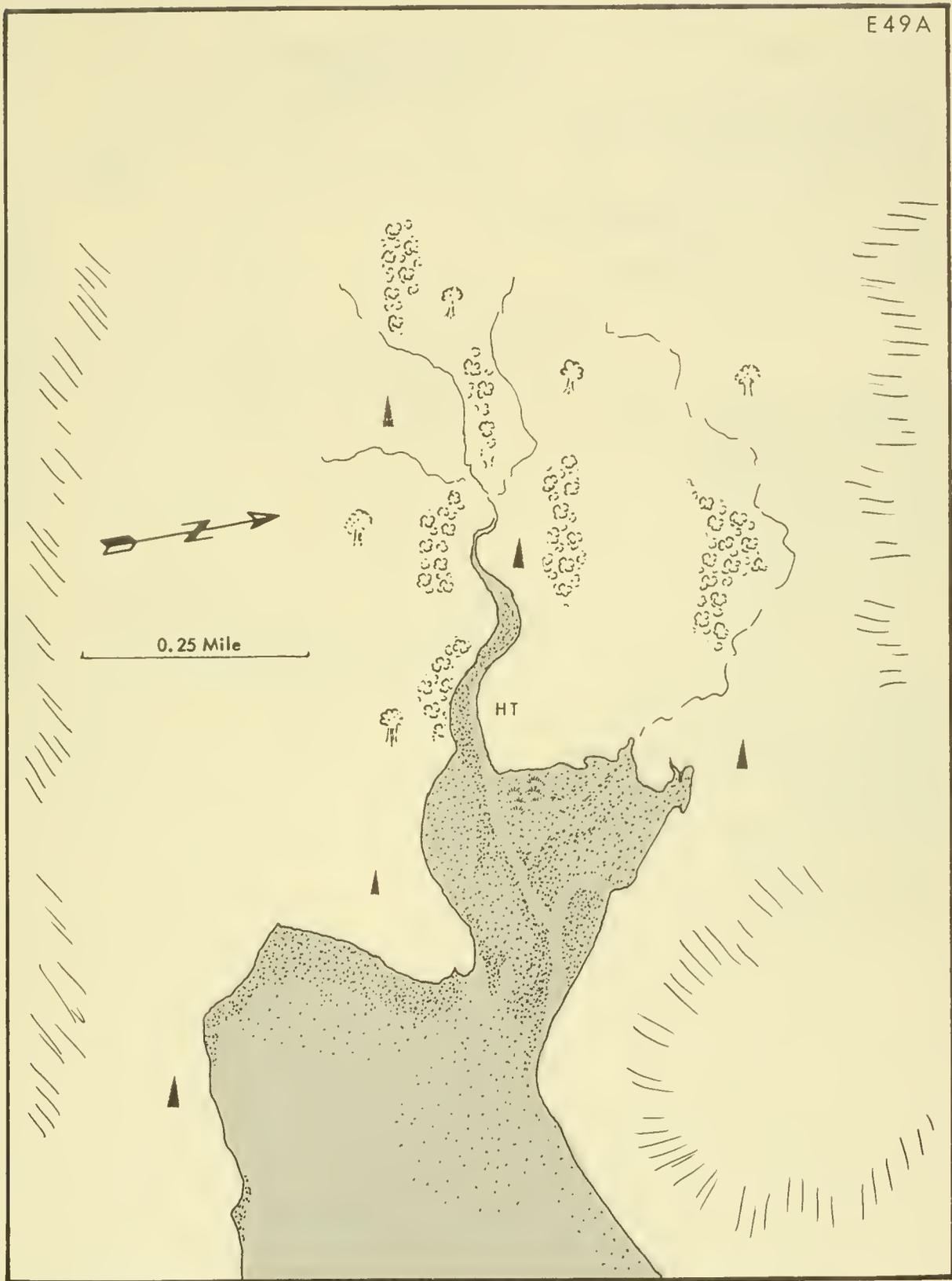
Date	Pink	Chum	Coho	Red	King	Remarks
1955						
Aug 29	103					
Aug 30	298					
Aug 31	325		2			
Sept 1	1,744		44			
Sept 2	2,243		11			
Sept 3	940		15			
Sept 4	502		2			
Sept 5	166					
Sept 6	112					
Sept 7	193					
Sept 8	223					
Sept 9	218					
Sept 10	110					
Sept 11	204					
Sept 12	576	2	26			
Sept 13	369	4	8			
Sept 14	145					
Sept 15	17		1			
Sept 16	3					
Sept 17	76		6			
Sept 18	21	2				
Sept 19	11					
Sept 20-21	-					
Sept 22	3					
Sept 23	5					
Sept 24	4		33			
Sept 25	1					
Sept 26-28	-					
Sept 29			1			
Sept 30			1			
Oct 1-2	-					
Oct 3			7			
Oct 4-5		Weir removed	-			
Totals	9,267	8	168			
1956						
Season	943					

Expected low count - only
575 pink fry went to sea
the spring of 1955

1957	
Aug 2	10
Aug 3	11
Aug 4	1
Aug 5	0
Aug 6	11
Aug 7	15
Aug 8	18
Aug 9	15
Aug 10	30
Aug 11	57
Aug 12	52
Aug 13	48
Aug 14	13
Aug 15	27
Aug 16	69
Aug 17	79
Aug 18	81
Aug 19	56
Aug 20	42

SASHIN CREEK - Continued

Date	Pink	Chum	Coho	Red	King	Remarks
1957						
Aug 21	67					
Aug 22	722	3	4			
Aug 23	178	5	1			
Aug 24	106	1				
Aug 25	24		1			
Aug 26	14					
Aug 27	148					
Aug 28	70	1				
Aug 29	92	2				
Aug 30	94	3				
Aug 31	157	27	8			
Sept 1	373	32	5			
Sept 2	40	9				
Sept 3	9	6				
Sept 4	0	2				
Sept 5	35	11	2			
Sept 6	21	10	7			
Sept 7	20	8	5			
Sept 8	7	3	1			
Sept 9	0					
Sept 10	8					
Sept 11	0					
Sept 12	2	1				
Sept 13	2	1				
Sept 14	2	1				
Sept 15-19	0					
Sept 20	4	6				
Sept 21	2					
Sept 22	0	1				
Sept 23-25	0					
Sept 26	0	3				
Sept 27-28	0					
Sept 29	1	2	22			
Sept 30	1	2	14			
Oct 1-8	0	Weir removed				
Totals	2,834	140	71			
1958						
Aug 30	3	22	16			
1959						
Aug 17						Jerry Olsen reports 25,000 salmon in bay



56° 23.4' N. 134° 42.8' W.

ADF STAT. No.
E 49A

EASTERN, CHATHAM STRAIT, BIG PORT WALTER, LOVER'S COVE, Head.

MAJOR SPECIES Pink. OTHER SPECIES
ESCAPEMENT TIMING Middle-late.
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 4.4 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
	Miles	By	Live	Dead	Live	Dead	Live	
1948								
Sept 20		FWS	3,000					
1954								
Sept 20		FWS	2,000					
1955								
Sept 5	G 0.5	FWS	2,000					4,000-5,000 pinks at mouth
Total fall run		FWS	15,000					
1956								
Sept 20	0.5	FWS	1,100		450			400 pinks at mouth
Oct 4	0.5	FWS	2,100		600			100 pinks at mouth
1957								
Aug 20	A falls	FWS						150 fish seen
1958								
Aug 31	G 0.2	FWS						No fish in stream; 6 pinks and 8 chums in tidal zone; 800 pinks and 50 chums off mouth
1959								
Aug 17	A 0.5	FWS	700					600 pinks in salt water
Aug 27	G 0.05	FWS	50					
1960								No record
1961								No record
1962								No record

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As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.

